



# UNITED STATES AIR FORCE

# OCCUPATIONAL SURVEY REPORT



RADIO COMMUNICATIONS SYSTEMS

AFSC 3C1X1

**OSSN: 2521** 

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OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION and TRAINING COMMAND
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#### **PREFACE**

This report presents the results of an Air Force Occupational Survey of the Radio Communications Systems career ladder (AFSC 3C1X1). Authority for conducting an occupational survey is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Career Field Manager, technical training school, all major using commands, and other interested operations and training officials.

First Lieutenant Toni L. Agnew, Inventory Development Specialist, developed the survey instrument. Second Lieutenant Sabrina Ocampo, Occupational Analyst, analyzed the data and wrote the final report. Mrs. Jeanie Guesman provided computer-programming support, and Ms. Dolores Navarro provided administrative support. Major Jose Caussade, Chief, Enlisted Analysis Section, reviewed and approved this report for release.

Additional copies of this report may be obtained by writing to AFOMS/OAOD, 1550 5<sup>th</sup> Street East, Randolph AFB TX 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our website at <a href="https://www-r.omsq.af.mil/">https://www-r.omsq.af.mil/</a>. (Note: If you experience a Microsoft Word security problem after clicking on the above link, please copy the web address into the Address window in your web browser.)

EUGENE H. HENRY, Lt Col, USAF Commander Air Force Occupational Measurement Squadron JOHN L. KAMMRATH Chief, Occupational Analysis Air Force Occupational Measurement Squadron

# OCCUPATIONAL SURVEY RADIO COMMUNICATIONS SYSTEMS (AFSC 3C1X1)

## **EXECUTIVE SUMMARY**

- 1. <u>Survey Coverage</u>: The Radio Communications Systems career ladder was surveyed to obtain current task and equipment data for use in evaluating current training programs. The data will also be used to support specialty knowledge test (SKT) development. Surveys were sent to 873 active duty (AD), 237 Air National Guard (ANG), and 233 Air Force Reserve Command (AFRC) personnel. Survey results were based on 414 AD, 68 ANG and 85 AFRC members responding.
- 2. Specialty Jobs: Structure analysis identified two clusters and two independent jobs (IJs) within the specialty. This career ladder contains a variety of jobs, but the vast majority of the members are within the Radio Operation Cluster (261 members). The top tasks for this core cluster deal with radio equipment set up and connection and disconnection of cryptographic equipment. There are five jobs within the Radio Operation Cluster. The top tasks for the Combat Crew Cluster (166 members) are dealing with classified or COMSEC materials and reviewing flying schedules. Two jobs were identified within this cluster. A Training/Management IJ and a MILSTAR Operation IJ were also identified.
- 3. <u>Career Ladder Progression</u>: The Radio Communications Systems career ladder progression is typical for the active duty member. There was a distinction between AD 5- and 7-skill-level members, with the 7-skill-level members performing more managerial and supervisory work. The 9-skill-level ANG and AFRC members are performing a mix of technical and supervisory tasks.
- 4. <u>Training Analysis</u>: The Specialty Training Standard (STS) for the specialty, dated 1 Feb 2002, was reviewed, and the STS was determined to be well supported by the survey data. A complete review of the STS has been provided to the technical school for evaluation. The Plan of Instruction (POI) for the 3-skill-level course, dated 1 October 2002, was also reviewed. Some STS and POI elements may need to be reviewed for possible inclusion in the STS and/or POI.
- 5. <u>Job Satisfaction Analysis</u>: In general, job satisfaction among most 3C1X1 personnel was lower than the comparative sample group (3C0X1 and 3C2X1). However, all job satisfaction indicators showed similar trends when compared to the previous OSR. Members identified in the Assembly Job within the Radio Operation Cluster had relatively low job satisfaction ratings and no intention to reenlist.
- 6. <u>Retention Dimensions</u>: Members in the three TAFMS groups (1-48 months, 49-96 months, and 97+ months) agreed on several factors potentially influencing their decision to reenlist or separate. Top factors for reenlistment include medical and dental care for AD member, job security, and military lifestyle. The top factors for separation include pay and allowances, location of present assignment, and military lifestyle.

## INTRODUCTION

## Air Force Occupational Measurement Squadron (AFOMS)

## Occupational Analysis Program

Simply put, our mission is to provide occupational data for decision makers, allowing them to make informed personnel, training, and education decisions based not on opinion and conjecture, but on empirical, quantitative data.

## Survey Development Process

An occupational survey begins with a job inventory (JI) -- a list of all the tasks performed by members of a given Air Force specialty code (AFSC) as part of their actual career field work (that is, additional duties and the like are not included). We include every function that career field members perform by working with technical training personnel and operational subject-matter experts (SMEs) to produce a task list that is complete and understandable to the typical job incumbent. The SMEs write each task to the same level of specificity across duty areas, and no task is duplicated in the task list.

In addition to this comprehensive task list, job inventories include a number of background questions that deal with demographic information, job satisfaction, equipment usage, and any other area that our customers, such as Career Field Managers (CFMs) and technical school personnel, may request.

Furthermore, the JI is only one of the surveys that AFOMS produces. The JI task list is used in creating several other surveys that are important for developing and refining career field training programs and for developing career field promotion tests; these surveys and how their results are used will be described shortly.

#### **Survey Administration**

The sample of members who receive the JI primarily depends on the size of the career ladder. We typically survey 100% of all eligible members in career ladders numbering 3,000 or fewer assigned members. For career ladders larger than 3,000 members, we select a random sample of half of the eligible members, and for very large career ladders we may sample one-third of all the eligible members. Return rates (the percentage of completed, usable surveys we receive back from the field) generally run between 50% - 70% or greater. All this combines to produce very large and very representative samples in almost every study we conduct, compared to the samples obtained by private commercial surveying and marketing firms, and this in turn leads to highly accurate information about the work and demographics of the career field.

Responding to the JI can be somewhat time-consuming when the number of tasks is large, but it is a simple process. Respondents are asked to examine each task and select each task that they perform in their present job. They are then asked to rate each task they chose on a scale of 1 to 9

(unchosen tasks are given a 0 rating), according to how much relative time they spend performing that task in their present job, compared to all the other tasks in the inventory. These ratings are converted into estimates of actual relative job time spent performing each task.

## Survey Analysis

Survey responses are processed using a set of computer programs called the Comprehensive Occupational Data Analysis Programs (CODAP). We are able to calculate some important basic information about each task from the information that respondents provide in the JI: the Percent Members Performing (PMP) and the Percent Time Spent (PTS). CODAP forms groups of survey respondents according to the similarity of their task performance, and our analysts study these groupings to identify distinct jobs. Further, we can provide PMP and PTS information for any subgroup. For example, we can easily determine the percent of E-5s or 3-skill-level or first-term airmen who perform each task, and estimate the average amount of job time they spend performing it. This is important because many of the applications of our data target particular subgroups within the career ladder.

## Uses of Survey Data

Survey results are formally reported in an Occupational Survey Report (OSR) -- what you are currently reading -- but the OSR is by no means the only product of an occupational survey study. The OSR provides a high-level "snapshot" of an entire AFSC in a compact package, but it is not intended to provide the comprehensive information needed to support important decisions about a career field. That is the purpose of "data extracts," which are comprehensive, detailed sets of CODAP-generated reports designed for particular applications.

The Training Extract -- AFOMS survey data are essential to technical training personnel. The training extract provides information about what career ladder incumbents are actually doing in their jobs at each stage of their career, along with supporting information regarding when and how members should be trained to perform their jobs. The data found in the training extract regarding first-job, first-term, and 3-skill-level members are the *primary source of empirical information* available to support such decisions.

In addition to the JI, AFOMS produces two other surveys that directly support the training community. Depending on the size of the career ladder, a sample of at least 50 (and frequently 100 or more) 7-skill-level craftsmen is selected to complete a Training Emphasis (TE) survey. A similar-sized sample of other 7-skill-level craftsmen is selected to complete a Task Difficulty (TD) survey.

The TE survey, like the JI, contains the complete career ladder task list, and, like the JI, respondents are asked to rate tasks on a 1 to 9 scale (tasks not rated by the respondent are assigned a "0" rating). Unlike the JI, however, respondents are asked to rate tasks based on how much emphasis they believe should be placed on that task for entry-level structured training. A "1" rating indicates the respondent's belief that very little emphasis be placed on providing structured training on that task. A rating of "9" indicates that it is essential to provide structured

training on the task. Structured training is defined as resident technical schools, field training detachments, mobile training teams, formal on-the-job training (OJT), or any other organized training method. The responses of the entire sample of raters are averaged for each task, and the result is a TE rating for each task.

The TD survey also contains the full task list and requests that respondents rate each task with which they are familiar on a scale of 1 to 9 ("1" is low, "9" is high), but this time respondents are asked to rate the amount of time needed to learn to perform that task satisfactorily. In other words, as the name implies, TD is an indicator of how difficult the task is to learn to do. The average TD rating for each task in the inventory is standardized with a mean rating of 5.0 and a standard deviation of 1.0.

When used in conjunction with the PMP and PTS for first-enlistment members, average TE and TD ratings provide insight into the appropriate training requirements for new personnel in the career ladder. These four indices (PMP, PTS, TE, and TD) are used to compute a composite index, the Automated Training Indicator (ATI), for each task. The ATI expresses in a single number between 1 and 18 the most appropriate training setting and approach for providing training for that task. ATIs allow training developers to quickly focus attention on those tasks that are most likely to qualify for resident course consideration. Further information concerning TE and TD ratings and ATIs for the entire task list can be found in the training extract that accompanies this OSR.

The major users of training extract information are attendees at Utilization and Training Workshops (U&TWs). The U&TW is a summit of representative career ladder, training, and classification leaders who evaluate current training efficiency and effectiveness in order to propose and approve changes to the Specialty Training Standard (STS) or course training standard (CTS), particularly with regard to 3-skill-level training, and to address utilization issues. The AFSC's job description in Attachment 6 of AFMAN 36-2108, *Enlisted Classification*, is also reviewed and appropriately revised with regards to the survey data to reflect the jobs being performed by the career ladder members.

Part of the process of compiling the training extract involves the STS matching process, during which technical school personnel match JI tasks to STS elements; that is, they tell us what particular task or tasks correspond to each STS element when it is covered in training. This is especially useful when STS performance codes are being reviewed for the 3-skill-level course. For example, the U&TW attendees might be asked to consider adding a task performance code to an STS element that previously has been trained only to a knowledge level. JI, TE, and TD data, combined in the form of the ATI, are important in determining the appropriate proficiency code. Separate training extracts are produced for Active Duty (AD), Air National Guard (ANG), and Air Force Reserve Component (AFRC) members.

The Specialty Knowledge Test (SKT) Extract -- AFOMS survey data are key to ensuring that SKTs are valid. SKTs are an important part of the Weighted Airman Promotion System (WAPS). Because an airman's test score is frequently the deciding factor in determining who is promoted, SKTs must be valid, fair, and credible.

In terms of SKTs, *valid* means that every question on the test is tied to a task which has been shown to be important to successful performance in the specialty. This tie is crucial to documenting the validity of SKT content.

AFOMS surveys provide test writers with information on the PMP, PTS, TD, and TE. This information is combined to produce a composite index called the predicted testing importance (PTI). Those tasks that are rated highest in PTI are ones that tend to be high in all four of our primary indices -- PMP, PTS, TD, and TE -- exactly the kinds of tasks that one would generally consider job-essential and that should form the basis for test questions. PTI information is used for minor test revisions; how it is used will be explained shortly.

Field-validated testing importance (FVTI) data are produced for major test revisions. Approximately 6 months before the start of test development, a sample of 100 senior career field NCOs is sent a survey containing a list of the 150-200 tasks rated highest in PTI. Respondents are asked to provide a 1-7 rating ("1" is low, "7" is high) of how important they believe it is to include a question concerning that task on the SKT. The responses are averaged for each task, yielding the FVTI index -- a direct measure of the opinions of career field experts as to what constitutes "job-essential" knowledge.

PTI and FVTI information is included in the SKT extract, which is specifically tailored for use by the SKT teams who come to AFOMS to write the promotion examinations. Two sets of reports are prepared -- one set uses only data for E-5s and the other uses combined data for E-6s and E-7s. Each report gives the SKT team information on every tasks PMP, PTS, and PTI, and, for major test revisions, FVTI data. Occupational survey data are thus the only objective source of information available to the team regarding how to make the test they write meet legal requirements for validity and fairness.

The Analysis Extract -- The analysis extract is an archive of all the data collected in the course of a study that are not incorporated into one of the other extracts. We typically produce separate analysis extracts for AD and ANG/AFRC members. The analysis extract is usually an enormous document, a compilation of the many reports that "slice and dice" the data in virtually every potentially useful way. Just about any question anyone has regarding career ladder work, personnel, or training and utilization issues can be answered by consulting one or another of the reports in the analysis extract.

<u>The OSR</u> -- This document, the OSR, captures survey data and analysis both in breadth and depth. For ease of reading, the first half of the OSR concentrates on breadth with compelling factors and implications across the specialty. Tables following the narrative show depth with regard to these factors and implications. Where appropriate, highlights of the tables are contained in the body.

# OCCUPATIONAL SURVEY REPORT (OSR) RADIO COMMUNICATIONS SYSTEMS (AFSC 3C1X1)

This is a report of an occupational survey of the Radio Communications Systems career ladder, conducted by the Occupational Analysis Flight, AFOMS. The OSR reports the findings of current data that are available for use in guiding the development and evaluation of training and support planned changes within this career ladder. In addition, the data are used to support SKT development. The previous OSR was completed in February 2000.

## Career Ladder Background

According to the specialty description in AFMAN 36-2108, Enlisted Classification, dated 31 October 2002, personnel in this career ladder operate radio and satellite communications systems and computer terminals. They tune transmitters, receivers, or transceivers to required signals on prescribed frequencies, and they adjust communications systems equipment, antenna systems, and terminal equipment to provide voice, digital, or analog operations. Personnel process communications traffic and copy transmissions from air and ground stations. Radio Communications Systems members process and relay operational and administrative messages, including flight, command, and control information, and weather data. They encode and decode classified messages and account for classified or controlled documents, equipment, and authentication systems, They maintain codes, communications security materials. communications directives and publications, and frequency propagation data.

The initial technical training school for this AFSC is located at Keesler AFB MS. The E3ABR3C131 003, Radio Communications Systems Apprentice course is 6 weeks and 1 day long and provides graduates with the knowledge and skills for the following principles and activities:

- Training in keyboarding, radio wave concept, characteristics of wave travel and propagation
- Training on application of radio emissions, introduction into computer technology, communications agencies, and security
- Training on high frequency (HF), very high frequency (VHF), ultra high frequency (UHF), and extremely high frequency (EHF) systems
- Training on air-ground-air and point-to-point communications by voice record and log keeping
- Training on inspections, minor maintenance, tuning and operation of ground transceivers and familiarization with transceiver principles and antenna systems

Entry into AFSC 3C1X1 requires an Armed Forces Vocational Aptitude Battery (ASVAB) "Administrative" score of 45 and a Strength Factor of "J" (weight lift of 60 lb). For entry, award, and retention of this AFSC, personnel must be able to speak English distinctly. For award and retention of this AFSC, personnel must be eligible for a Secret security clearance according to AFI 31-501, Personnel Security Program Management. Finally, AFSC 3C1X1 is open to United States citizens and United States nationals only.

## **SURVEY METHODOLOGY**

## **Inventory Development**

The data collection instrument for this occupational survey was USAF job inventory (JI) occupational survey study number (OSSN) 2521, dated May 2002. During the development of the comprehensive task list, 28 subject-matter experts from 5 operational bases and 1 training unit were interviewed. The survey requested standard background information such as base of assignment; command of assignment; TAFMS, TICF, and TIPJ; job title; work or functional area; paygrade; job satisfaction and reenlistment intentions. Additional background items concerned the number of deployments and days TDY; paygrade at which the member entered this AFSC if retrained from another specialty; communications modes or systems used or operated; and communications equipment used or operated. The inventory listed 370 tasks grouped under 13 duty headings and a background section. (The complete task list is available on the CD containing the products from this study.)

BASE	REASON FOR VISIT
Keesler AFB MS	Technical training school
Hurlburt Field FL	AFSOC mission
Peterson AFB CO	Large population and MILSTAR satellite communications centers
Barksdale AFB LA	Combat Crew Communications mission
Lackland AFB TX	Aeromedical Evacuation Squadron
Andrews AFB MD	Mystic Star ultra-high frequency operations & System Information and Telecommunications System

#### 3C1X1 Survey Administration

From June to September 2002, survey control monitors at the technical training school and operational bases administered the inventory to all eligible DAFSC 3C131, 3C151, 3C171, and 3C191 AD, ANG, and AFRC personnel. Members ineligible to take the survey included the following: (1) hospitalized members; (2) members in transition for a permanent change of station; (3) members retiring within the time the inventories were administered to the field; and (4) members who had been in their present jobs for less than 6 weeks. Participants were selected from a computer-generated mailing list obtained from data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

## Survey Sample

The data on survey returns were examined to ensure that the final sample reflected an accurate representation across major commands (MAJCOMs), paygrades, and skill levels. <u>Table 1</u> shows the distribution of the survey sample by MAJCOM, while <u>Table 2</u> displays the survey distribution by paygrade groups. <u>Table 3</u> shows the final sample distribution by skill level. <u>Table 4</u> displays the component characteristics for the AD, ANG, and AFRC members in the final sample.

TABLE 1

MAJCOM REPRESENTATION OF TOTAL SAMPLE			
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE	
ACC	16	22	
AFRC	17	15	
AFSOC	7	7	
AFSPC	7	10	
ANG	18	12	
AMC	25	27	
OTHER**	6	3	
PACAF	. 2	2	
USAFE	2	2	
TOTAL ASSIGNED*		1,530	
TOTAL ELIGIBLE***		1,343	
TOTAL SURVEYS MAILED		1,343	
TOTAL IN SAMPLE		567	
PERCENT OF ASSIGNED	IN SAMPLE	37%	
PERCENT OF ELIGIBLE	IN SAMPLE	42%	
PERCENT OF MAILED IN	N SAMPLE	42%	

<sup>\*</sup> As of 31 May 02

<sup>\*\*</sup> Percentages in "Other" include Air Education and Training Command, United States Special Operations Command, and United States Strategic Command.

<sup>\*\*\*</sup> Excludes those personnel in PCS, student or hospital status, or with less than 6 weeks on the job

TABLE 2

PAYGRADE DISTRIBUTION OF SAMPLE			
PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE	
E-1 - E-2	4	1	
E-3	20	20	
E-4	23	26	
E-5	21	23	
E-6	17	15	
E-7	13	14	
E-8	2	1	

<sup>\*</sup> Assigned as of May 02

TABLE 3

SKILL-LEVEL DISTRIBUTION OF SAMPLE			
SKILL-LEVEL	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE	
3C131	22	19	
3C151	48	53	
3C171	28	26	
3C191	3	2	

\* Assigned as of May 02
Note: Columns may not add up to 100% due to rounding

TABLE 4

COMPONENT CHARACTERISTICS		
<u>AD</u>	<u>ANG</u>	<u>AFRC</u>
996	268	266
873	237	233
414	68	85
47	29	36
	<u>AD</u> 996 873 414	AD ANG 996 268 873 237 414 68

<sup>\*</sup> Assigned as of May 02

The command, paygrade, and skill-level distributions of the survey sample are close to the percent assigned indicating that the sample is a true representation of the career ladder population assigned to the MAJCOMs.

#### **3C1X1 JOB STRUCTURE**

The first step in the analysis process is to identify the career ladder structure in terms of the jobs performed by the respondents. CODAP creates an individual job description for each respondent based on the tasks performed and relative amount of time spent on these tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and combines them to form a composite job description. In successive stages, CODAP either adds new members to this initial group or forms new groups based on the similarity of tasks and time spent ratings. Human analysis of the final output, aided by additional measures of similarities and differences between groups, determines the final job structure of the career field as described here.

The basic group used in the hierarchical clustering process is the <u>Job</u>. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a <u>Cluster</u>. Jobs not falling within any cluster are identified as <u>Independent Jobs (IJs)</u>. The structure of the career ladder is then defined in terms of clusters, jobs, and independent jobs. The job structure resulting from this grouping process (the various jobs within the AFSC) can be used to evaluate the changes that have occurred in the AFSC since the previous OSR. It can also be used to guide future changes in the AFSC. The above terminology will be used in the discussion of the 3C1X1 career ladder.

## **Specialty Jobs**

Based on the analysis of tasks performed and the amount of time spent performing each task, two clusters and two independent jobs were identified within the Radio Communications Systems career ladder. Figure 1 shows this job structure. A written outline of the job structure follows. The stage (STG) number shown beside each title refers to computer-generated tracking information of no importance to the reader. The letter "N" represents the number of members in each group. Tables 5-10 (at the end of this report, following the narrative) provide detailed descriptions of the clusters and jobs listed below, including demographic information and representative tasks that members perform. In addition, the tables show some distinguishing tasks performed by members of jobs identified within clusters.

# I. RADIO OPERATION CLUSTER (STG 24, N=261)

- A. ASSEMBLY JOB (STG 113)
- B. CONFIGURATION JOB (STG 76)
- C. RADIO MAINTENANCE JOB (STG 126)
- D. RADIO OPERATION JOB (STG 73)
- E. GLOBAL SYSTEM JOB (STG 82)

- II. COMBAT CREW CLUSTER (STG 49, N=166)
  - A. COMBAT CREW JOB (STG 77)
  - B. TRAINING JOB (STG 72)
- III. TRAINING/MANAGEMENT IJ (STG 86, N=10)
- IV. MILSTAR OPERATION IJ (STG 109, N=49)

<u>Table 11</u>, at the end of this narrative, displays time spent on duties by the members within these clusters, jobs within the clusters, and independent jobs.

# AFSC 3C1X1 CAREER LADDER SPECIALTY JOBS (N=567)

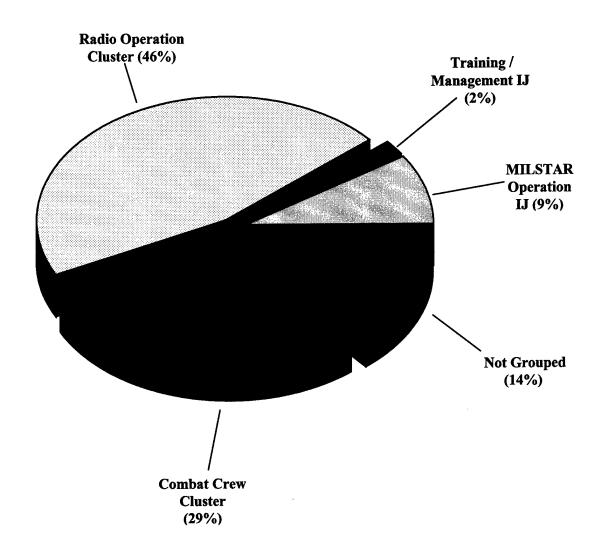


FIGURE 1

## Members Not Grouped

- Remaining 14% of survey sample did not group with any cluster or independent job
  - Survey respondents sometimes do not fall into an identified job because they perform fewer tasks or mark the same tasks but give considerably different time spent ratings for those tasks
  - In addition, there may not have been enough individuals performing the same combination of tasks to warrant identification of a job
  - Members not grouped into any clusters or independent jobs were holding a variety of jobs, such as MILSTAR System Operator, Satellite Manager, Maintenance Control Technician, and Payload System Operator. Others not grouped were taking on additional duties, such as work group manager, readiness NCO, and acting first sergeant
  - Important point to note is that all major AFSC functions are covered in identified clusters and independent jobs

## Comparison of Current Specialty Jobs to Previous Survey

Results of the specialty job analysis were compared to those of the previous OSR, published in 2000. As shown in <u>Table 12</u>, the jobs found in this report mirror those found in the previous study, with a few exceptions.

The main cluster, the Radio Operation Cluster, contains several jobs that were likely encompassed by independent jobs in the previous study, such as Global High Frequency Supervisor Job and Operations Center Technician, which were identified in the Radio Operation Cluster as Global System Job and Radio Operation Job in the current study. Another distinction between the 2000 and the current study includes the MYSTIC Star Operator Job which is not discerned in this survey report.

- Jobs in which 3C1X1 members were identified in the 2000 study were also identified in current study to a large extent, such as the previous Management and Supervisor Cluster being identified in the current OSR as the Training/Management IJ. The previous Combat Crew Communications Job was identified in the current study as the Combat Crew Cluster
  - Overall nature of the 3C1X1 career ladder has not changed a great deal since the previous study

## SKILL AND EXPERIENCE ANALYSIS

An analysis of DAFSC groups in conjunction with the analysis of the career ladder structure is an important part of each OSR. This information may be used to evaluate how well career ladder documents, such as AFMAN 36-2108, *Enlisted Classification*, reflect what career ladder personnel are actually doing in the field.

## **TOTAL SAMPLE**

## **Jobs**

<u>Table 13</u> – Distribution of skill-level members across career ladder clusters and jobs:

- Majority of 3-, 5-, and 7-skill-level members were found performing work as described in the Radio Operations Cluster
- Most DAFSC 7-skill-level members were found in the Training/Management IJ
- Majority of 9-skill-level members were found performing tasks in the Combat Crew Cluster

## **Duties**

<u>Table 14</u> – Time spent on duties by members of skill-level groups:

- Members in the 3- and 5-skill-level groups spend most of their time performing tasks in Duty A (Setting Up Radio Equipment) and Duty I (Performing General Administrative and Technical Order (TO) System Activities)
- 7- and 9-skill-level members spend much more time performing management and supervisory activities (Duty M)
- No information will be noted on AD members in the 9-skill level group due to only two members responding to the survey
- Overall, the most time spent on duties by members of AFSC 3C1X1 are found in Duty A (Setting Up Radio Equipment)

## AD

#### **Duties**

# <u>Table 15</u> – Time spent on duties by AD members of skill-level groups:

- AD 3-skill-level members spend most of their time performing tasks in Duty A
  (Setting Up Radio Equipment) and Duty I (Performing General Administrative and
  Technical Order (TO) System Activities)
- AD 5- and 9-skill-level members spend most of their time performing tasks in Duty I (General Administrative and Technical Order (TO) System Activities) with 9-skill-level members spending 44% of their time on this duty
- AD 7-skill-level members spend the majority of their time performing tasks in Duty M (Performing Management and Supervisory Activities), significantly more than all other skill-level members

#### **Tasks**

## Table 16 – Tasks performed by AD AFSC 3C131 members:

Tasks being performed by highest percentages of 3-skill-level members are in Duties
A and I (Setting Up Radio Equipment and Performing General Administrative and
Technical Order System Activities, respectively)

# <u>Table 17</u> – Tasks performed by AD AFSC 3C151 members:

 Tasks being performed by highest percentages of 5-skill-level members show the career ladder is heterogeneous at this skill level with only six tasks performed by 50% of members

# <u>Table 18</u> – Tasks performed by AD AFSC 3C171 members:

- Heavy emphasis on supervisory and managerial activities at this skill level
- No data will be displayed for the AD 9-skill-levels due to only two members responding

## **ANG**

#### **Duties**

# <u>Table 19</u> – Time spent on duties by ANG members of skill-level groups:

- ANG members at the 5-skill level spend the majority of their time performing tasks in Duty A (Setting Up Radio Equipment), a significant difference from AD 5-skill-level members who spend most of their time in Duty I (Performing General Administrative and Technical Order (TO) System Activities)
- ANG 7-skill-level members spend most time performing tasks in Duty I (Performing General Administrative and Technical Order System Activities), with the second highest amount of time spent in Duties A and F (Setting Up Radio Equipment and Performing Combat Crew Communications Activities, respectively)
- ANG 9-skill-level members spend 23% of their time performing tasks in Duty M (Performing Management and Supervisory Activities), significantly more than ANG 5- and 7-skill-level members

#### **Tasks**

## Table 20 – Tasks performed by ANG AFSC 3C151 members:

 Tasks being performed by highest percentages of 5-skill-level members are in Duty A (Setting Up Radio Equipment)

# <u>Table 21</u> – Tasks performed by ANG AFSC 3C171 members:

 A high percentage of the ANG 7-skill-level members are performing tasks associated with classified or COMSEC materials. The majority of the tasks being performed by over 50% of members are in Duties A (Setting Up Radio Equipment) and Duty I (Performing General Administrative and Technical Order (TO) System Activities, respectively)

# <u>Table 22</u> – Tasks performed by ANG AFSC 3C191 members:

Tasks being performed by highest percentage of 9-skill-level members show the career ladder is homogeneous at this skill level with the majority of the tasks being performed by all members. A high number of tasks being performed are in Duty F (Performing Combat Crew Communications Activities) and some management tasks are also being performed at this skill level

## **AFRC**

#### **Duties**

# <u>Table 23</u> – Time spent on duties by AFRC members of skill-level groups:

- Overall, AFRC 3C1X1 members spend a high amount of time performing tasks in Duty A (Setting Up Radio Equipment)
- AFRC 5-skill-level members spend the majority of their time Setting Up Radio Equipment (Duty A)
- AFRC 7-skill-level members spend most of their time Performing General Administrative and Technical Order System Activities (Duty I)
- AFRC 9-skill-level members spend the majority of their time Performing Mobility and Contingency Activities (Duty K) and Performing Training Activities (Duty L)

## **Tasks**

## <u>Table 24</u> – Tasks performed by AFRC AFSC 3C151 members:

■ Tasks being performed by highest percentages of 5-skill-level AFRC members are very similar to tasks being performed by 5-skill-level ANG members, with the majority of the members performing tasks in Duty A (Setting Up Radio Equipment)

# <u>Table 25</u> – Tasks performed by AFRC 3C171 members:

 AFRC 7-skill-level members are performing more technical tasks as opposed to the AD 7-skill-level members. Tasks performed by highest percent of 7-skill-level members are in Duty I (Performing General Administrative and Technical Order (TO) System Activities)

# <u>Table 26</u> – Tasks performed by AFRC 3C191 members:

 Members in this skill level are performing tasks associated with mobility and contingency activities (Duty K) and Performing Training Activities (Duty L)

#### TRAINING ANALYSIS

Occupational survey data are a source of information that can assist in the development or evaluation of training programs for both entry-level and advanced members. In particular, the factors used to evaluate entry-level member training include the jobs that are being performed by first-enlistment personnel (1-48 months' TAFMS), the overall distribution of first-enlistment personnel across career ladder jobs, the percent of first-enlistment members who perform specific tasks, and ratings of relative training emphasis (TE) and task difficulty (TD). (TE and TD ratings are discussed in the <u>Task Factor Administration</u> section of this OSR.)

# WHAT ENTRY-LEVEL MEMBERS NEED TO KNOW

First-Enlistment Personnel (1-48 months' TAFMS)

N=216 (38% of sample)

#### Jobs

Figure 2 – Distribution of first-enlistment personnel across specialty clusters and jobs:

 Decrease of 5% in Radio Operation Cluster and a increase of 5% in Combat Crew Cluster versus jobs for the total sample (Figure 1)

#### **Duties**

<u>Table 27</u> – Relative time spent on duties:

■ Top duties include Duty I (Performing General Administrative and Technical Order (TO) System Activities) and Duty A (Setting Up Radio Equipment)

#### **Tasks**

<u>Table 28</u> – Representative tasks performed

# **Equipment Used or Operated**

<u>Table 29</u> – Fixed Communications Systems

<u>Table 30</u> – Deployable Communications Systems

<u>Table 31</u> – Frequency Bands

<u>Table 32</u> – Communications Modes

<u>Table 33</u> – Mobile Communications Systems

<u>Table 34</u> – Communications Equipment

# DISTRIBUTION OF AFSC 3C1X1 FIRST-ENLISTMENT PERSONNEL ACROSS SPECIALTY JOBS (N=216)

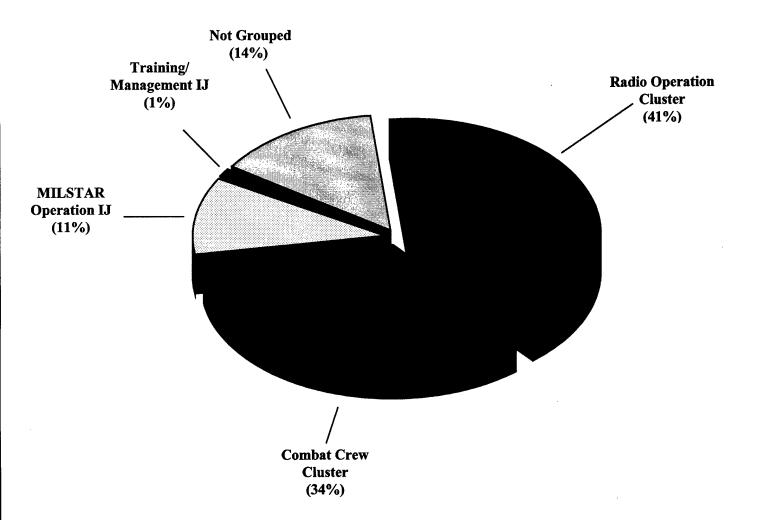


FIGURE 2

## TASK FACTOR SURVEYS

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information, along with data from the specialty training standard (STS) and plan of instruction (POI), is needed for a complete analysis of the career ladder. To obtain the needed task factor data, selected DAFSC 3C1X1 members (generally E-6 or E-7 craftsmen) completed either a training emphasis (TE) or task difficulty (TD) survey. These training documents (STS and POI) were reviewed by matching survey tasks to STS elements, then examining task performance, TE data, and TD data for the matched tasks.

## Task Factor Administration

TE and TD data can help training development personnel decide which tasks to emphasize for entry-level, structured training (resident technical schools, field training detachments, mobile training teams, formal OJT, or any other organized training method). For example, tasks receiving high TE and TD ratings generally warrant resident training if they are also performed by a moderate-to-high percentage of first-enlistment members. Tasks receiving high TE and/or TD ratings but being performed by relatively low percentages of first-enlistment members may be more appropriately planned for structured OJT programs within the career ladder. Low TE and/or TD ratings may highlight tasks best omitted from training for new personnel. These task factors are, of course, not the only ones to weigh in making training decisions; the percentages of personnel performing the tasks, command concerns, the criticality of the tasks, and other important factors must also be carefully considered.

<u>Training Emphasis (TE)</u> — Training Emphasis data were not used in this study due to poor agreement among the respondents asked to complete a TE survey.

<u>Task Difficulty (TD)</u> — amount of time needed to learn to perform that task satisfactorily:

- Thirty DAFSC 7-skill-level senior NCOs rated the difficulty of tasks in the inventory using a scale from 1 (extremely low difficulty) to 9 (extremely high difficulty)
- TD ratings are normally adjusted so that tasks of average difficulty have a value of 5.00 and a standard deviation of 1.00
  - Any task with a difficulty of 6.00 or greater is therefore considered difficult to learn

# <u>Table 35</u> – Tasks with highest TD ratings:

- Lists percent members performing these tasks by 1-24 months' and 1-48 months' TAFMS groups, as well as members of the 3-, 5-, and 7-skill-level groups
- Tasks within Duty A (Setting Up Radio Equipment) and Duty M (Performing Management and Supervisory Activities) received the highest TD ratings. A total of 59 tasks were rated with a high TD rating. Table 35 lists 22 of the 59 tasks that had the

highest TD, such as cut antenna lengths and write staff studies, surveys, or routine reports, other than training or inspection reports

# WHAT DO 3C1X1 TRAINING DOCUMENTS REFLECT?

## Specialty Training Standard (STS) Analysis

Technical school personnel from the 336th Training Squadron, Keesler AFB MS, matched JI tasks to STS items. The STS was dated Feb 2002. Per AETCI 36-2601, dated 14 July 1999, STS elements that are performed by at least 20% of members in appropriate skill-level groups [particularly first-job (1-24 months' TAFMS) members and first-enlistment (1-48 months' TAFMS) members] should be included in the STS. Of course, these are not the only criteria for inclusion in the STS, and other rational considerations may argue against inclusion. Likewise, proficiency-coded elements matched to tasks with less than 20% performing in first-job and first-enlistment groups should be closely reviewed by subject-matter experts for possible deletion from the STS, unless other considerations (such as mission criticality or criticality to a particular MAJCOM) argue for inclusion of these "unsupported items." As stated above, several tasks not referenced to the STS with at least 20% of the first-job or first-enlistment members performing should be reviewed by training personnel for possible addition to the STS.

# <u>Table 36</u> – STS element not supported by survey data:

 One task matched to an STS element with a "2b" proficiency code was performed by less than 20% of job incumbents in their first job or first enlistment; this task should be reviewed for removal from the STS

<u>Table 37</u> –Tasks performed by 20% or more members in their first-job or first-enlistment but not referenced to any STS element:

- Tasks not referenced to STS elements include configuring transceivers for clear or secure voice operation; identifying and reporting equipment or supply problems; inventorying equipment, tools, parts, or supplies; preparing equipment for deployment; and processing classified or COMSEC materials or documents at deployed locations
- A complete listing of tasks not referenced to the STS can be found at the end of the STS report in training extract; these tasks should be reviewed for possible addition to STS

Overall, the STS is very well supported by the survey data. Only one STS item was not supported, and five unreferenced JI tasks were performed by more than 20% of the first-job or first-enlistment members.

## Plan of Instruction (POI) Analysis

In addition to the STS, the POI for a course may also have unsupported objectives (included in the course but performed by few first-term airmen.) Personnel from the 336 TRS also matched JI tasks to related training objectives in the POI for the entry-level course. POI blocks, units of instruction, and learning objectives were then compared to the standard set forth in AETCI 36-2601. This document indicates that tasks trained in the course but not performed by at least 30% of first-enlistment members should be considered for elimination from the course, unless other rational considerations argue for inclusion. This is especially so if TE ratings for the task are not particularly high.

<u>Table 38</u> – POI objectives not supported by survey data with less than 30% members performing tasks matched to those objectives:

- Unsupported POI objectives include tasks such as setting up antenna masts, siting radio antennas or equipment, and reconfiguring antennas
- A complete listing of POI objectives and tasks matched to those objectives can be found in the POI report in the training extract; these POI objectives should be reviewed for possible revision

Table 39 - Tasks performed by 30% or more members but not referenced to any POI objective:

- Tasks not referenced that are performed by 30% or more first-job or first-enlistment members include connecting or disconnecting cryptographic equipment; verifying keying of cryptographic equipment; assembling, issuing, retrieving, or breaking down of daily training communication kits; and assembling, issuing, retrieving, or breaking down exercise or contingency conventional communication kits
- A complete listing of tasks not referenced to the POI can be found at the end of the POI report in the training extract; these tasks should be reviewed for possible addition to POI

Overall, the POI is very well supported by the survey data. Only one unsupported POI objective was identified, and five unreferenced tasks being performed by more than 30% of the first-job or first-enlistment members were identified.

## JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. The survey included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions.

## Job Satisfaction

#### Overall = Good

<u>Table 40</u> - Job satisfaction data by job groups identified in **3C1X1 JOB STRUCTURE** section of this report reveals:

- Assembly Job very low job satisfaction overall compared to the remaining jobs within
  the Radio Operation Cluster and lowest sense of accomplishment with 100% of
  members responding that they are dissatisfied with the sense of accomplishment gained
  from their job
- Training/Management IJ highest rate of reenlistment intentions (40%)
- Assembly Job, Configuration Job, and MILSTAR Operation IJ lowest reenlistment intentions compared to all other jobs within the Radio Operation Cluster and with other jobs within the sample
- Training Job expressed highest job interest (59%)

<u>Table 41</u> displays comparative job satisfaction data between the current 3C1X1 OSR data and members from similar AFSCs surveyed in the previous 12 months. (Two AFSCs met this criterion – AFSC 3C0X1 and AFSC 3C2X1.) The results from the comparison data are summarized below:

- Overall, job satisfaction ratings for the 3C1X1 members are much lower compared to the ratings from 3C0X1 and 3C2X1 members. Twenty-five percent of the members in the 1-48 months' TAFMS group indicated that they found their job interesting, while 45% found their job to be dull. In the 49-96 months' TAFMS group, none of the 3C1X1 members perceive their use of talent to be "excellent to perfect", and 38% found their job interesting. The 97+ months' TAFMS group rated all five job satisfaction indicators the highest of the three TAFMS groups
- "Perceived use of training" for 3C1X1 97+ months' TAFMS group is rated slightly higher compared to the 3C0X1 and 3C2X1 members' ratings

<u>Table 42</u> displays job satisfaction data for the AD, ANG, and AFRC members. The results for the three components are summarized below:

There are four job satisfaction indicators (Expressed Job Interest, Perceived Use of Talents, Perceived Use of Training, and Sense of Accomplishment From Job). Overall, satisfaction ratings for the ANG members are higher than the AD and AFRC members, especially for job interest and sense of accomplishment from job.

<u>Table 43</u> compares job satisfaction data for the current 3C1X1 OSR data and the 2000 3C1X1 survey. The results of the comparison are summarized below:

- Overall, job satisfaction ratings for the 3C1X1 members in the current study are slightly lower compared to the 3C1X1 members in the previous study
- Reenlistment intentions for 3C1X1 second-term airmen in the current study are comparable to their reenlistment intentions in 2000

#### **RETENTION DIMENSIONS**

JIs also routinely collect information about factors that affect reenlistment and separation decisions. That is, respondents who say that they are likely to reenlist at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to reenlist. Respondents who indicate that they are likely to separate at the end of their present term (and those not eligible for retirement) are asked to indicate whether each of 31 different factors will have any effect on their intended decision and, if so, the degree to which each factor may influence their decision to separate. The degree is indicated on a 3-point scale ranging from "slight influence" to "strong influence."

## Reenlistment

<u>Table 44</u> – Lists the 31 factors in the order they appeared in the survey. Also shown is the percent selecting each factor and the average rating for each factor by TAFMS group based on how much each factor may influence their decision to reenlist:

- Top 5 reasons members may choose to reenlist based on the highest percentages selecting each factor are listed below Table 44
  - For the first- and second-enlistment groups, medical/dental care for AD member was the top reason for reenlistment
  - For 97+ months' TAFMS group, the top reason for reenlistment was retirement benefits
  - Off-duty education or training opportunities, military-related education and training opportunities, job security, and military lifestyle were major influences on reenlistment for two of the three TAFMS groups

## Separation

<u>Table 45</u> – Displays the percentages of the members for each TAFMS group indicating that their plans to separate may be influenced by each factor, as well as the average ratings by TAFMS group for the 31 factors based on the influence each factor may have on the respondents' decisions to separate:

- Top 5 reasons members in each TAFMS group may choose to separate based on the highest percentages selecting each factor are listed below Table 45
  - Pay and allowances, military lifestyle, recognition of efforts, and esprit de corps/morale are among the top five factors that may influence the respondents' decisions to separate for two of three TAFMS groups

### RADIO OPERATION CLUSTER (STG 24) (N=261)

Average Time in Present Job	48 months	
Average TAFMS	75 mc	onths
Predominant Paygrade	E-4	28%
Predominant Skill Levels	3C151	52%
	3C171	26%

TASKS	AVERAGE NUMBER OF TASKS PERFORMED 96	MEMBERS PERFORMING
A0008	Key or zeroize secure cryptographic systems	88
D0101	Perform radio checks	86
A0002	Connect or disconnect antennas to radio equipment	80
A0026	Set up radio equipment	78
A0005	Connect or disconnect cryptographic equipment	75
C0071	Perform operational checks of radio systems	74
A0016	Set up antenna masts	73
A0001	Connect or disconnect antenna couplers	72
I0212	Destroy classified or COMSEC materials or documents	72
A0004	Connect or disconnect computer equipment	70
A0019	Set up high frequency (HF), very high frequency (VHF), ultrahigh frequency (UHF), or	69
	extremely high frequency (EHF) mobile satellite antennas	
A0030	Verify keying of cryptographic equipment	69
A0032	Verify or load equipment presets	67
D0115	Receive, transmit, or relay messages	65
I0213	Establish or maintain accountability records for classified or COMSEC materials or	65
•	documents	
D0081	Conduct data transmission using phonetic alphabet	64
A0028	Site radio antennas or equipment	64
<b>D</b> 0076	Authenticate stations using challenge-and-reply systems	63
A0029	Tune receivers, transceivers, or transmitters	61
B0034	Change receiver, transceiver, or transmitter frequencies manually or by remote control	61
<b>D</b> 0077	Broadcast radio transmissions	60
D0075	Authenticate message traffic using transmission authentication systems	60
D0092	Identify incoming calls using call-sign lists	58
E0118	Identify antenna system malfunctions	58
A0023	Set up mobile HF, VHF, UHF, or EHF satellite transceivers	57
D0102	Perform signal testing in radio communications	56
D0104	Perform time hacks	56
D0082	Conduct data transmission using prosigns	56
L0300	Conduct on-the-job training (OJT)	55
B0059	Reconfigure antennas	55
E0119	Identify computer equipment malfunctions	54

### JOBS IDENTIFIED WITHIN RADIO OPERATION CLUSTER

### **ASSEMBLY JOB (STG 113)**

### DEMOGRAPHICS

Average Time in Present Job	29 months	
Average TAFMS	30 mont	hs
Predominant Paygrade	E-3	67%
Predominant Skill Level	3C151	67%

### DISTINGUISHING TASKS

A0001	Connect or disconnect antenna couplers
A0003	Connect or disconnect commercial power supplies
A0013	Select frequency-of-optimum transmissions (FOTs)
A0028	Site radio antennas or equipment
B0059	Reconfigure antennas

### **CONFIGURATION JOB (STG 76)**

### **DEMOGRAPHICS**

Average Time in Present Job	33 months	
Average TAFMS	40 months	
Predominant Paygrade	E-4	56%
Predominant Skill Level	3C131	62%

### DISTINGUISHING TASKS

Connect or disconnect antenna couplers
Connect or disconnect commercial power supplies
Install grounding systems
Set up mobile international maritime satellite (INMARSAT) equipment
Configure transceivers for secure radio data transfer

### **RADIO MAINTENANCE JOB (STG 126)**

### **DEMOGRAPHICS**

Average Time in Present Job

Average TAFMS

Predominant Paygrade

Skill Level

25 months

32 months

F-4

70%

Skill Level

3C151

100%

### **DISTINGUISHING TASKS**

### C0069

Operate or maintain recording devices

### D0085

Conduct phone patch automatically or manually

### H0188

Perform DAMA procedures

### **RADIO OPERATION JOB (STG 73)**

### **DEMOGRAPHICS**

Average Time in Present Job	62 months	
Average TAFMS	92 mont	hs
Predominant Paygrade	E-3	23%
Predominant Skill Level	3C151	55%

### DISTINGUISHING TASKS

A0001	Connect or disconnect antenna couplers
A0017	Set up controlled safety or security areas
A0031	Verify radio nets for tactical or nontactical radios
D0115	Receive, transmit, or relay messages
K0274	Erect tents

### **GLOBAL SYSTEM JOB (STG 82)**

Average Time in Present Job	23 months	
Average TAFMS	72 months	
Predominant Paygrade	E-3	38%
Predominant Skill Level	3C151	44%

### DISTINGUISHING TASKS

D0106	Prepare messages using Emergency Action Messages (EAM) format
D0107	Prepare messages using Foxtrot format
E0120	Identify console malfunctions
I0212	Destroy classified or COMSEC materials or documents

### TABLE 7

### COMBAT CREW CLUSTER (STG 49) (N=166)

Average Time in Present Job	36 months	
Average TAFMS	84 months	
Predominant Paygrade	E-4	24%
Predominant Skill Levels	3C131	38%
	3C151	44%

		PERCENT MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 52	PERFORMING
I0212	Destroy classified or COMSEC materials or documents	87
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	85
I0213	Establish or maintain accountability records for classified or COMSEC materials or	84
	documents	70
F0147	Issue, load, or retrieve cryptographic equipment	78 70
A0008	Key or zeroize secure cryptographic systems	78 77
I0239	Store classified or COMSEC materials or documents, other than at deployed locations	77
10228	Prepare administrative, classified, or COMSEC materials or documents for mailing, transporting, or issue	73
10240	Transport classified or COMSEC materials or documents	73
F0148	Issue or retrieve Identification Friend or Foe (IFF) or Special Identification Feature (SIF)	71
	codes	70
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	70
F0139	Brief aircrews on communications procedures	70
F0151	Review flying schedules	69
F0135	Assemble, issue, retrieve, or break down daily training communication kits	68
I0215	Identify and report suspected security compromises	67
A0030	Verify keying of cryptographic equipment	66
F0138	Assemble, issue, retrieve, or update flight information publication (FLIP) bags	61
I0229	Prepare reports of security or COMSEC violations	60
F0137	Assemble, issue, retrieve, or break down single integrated operations plan (SIOP) communication kits	59
I0219	Maintain administrative files	58
L0300	Conduct on-the-job training (OJT)	55
K0292	Process classified or COMSEC materials or documents at deployed locations	50
F0142	Conduct SIOP or safe passage communications training	49

L0312	Maintain training records or files	48
L0309	Evaluate progress of trainees	46
F0144	Create exercise or contingency communications FLIMSYs	45
F0146	Issue, load, retrieve or zeroize transfer modules	· 43
J0250	Inventory equipment, tools, parts, or supplies	42
I0227	Perform two-person integrity (TPI) procedures for top secret materials	41
I0216	Initiate classified reports, messages, or documents	41
A0005	Connect or disconnect cryptographic equipment	40

### JOBS IDENTIFIED WITHIN COMBAT CREW CLUSTER

### **COMBAT CREW JOB (STG 77)**

### **DEMOGRAPHICS**

Average Time in Present Job	34 mont	hs
Average TAFMS	51 mont	hs
Predominant Paygrade	E-4	36%
Predominant Skill Level	3C151	62%

### TOP TASKS

I0212	Destroy classified or COMSEC material or documents
I0213	Establish or maintain accountability records for classified or
	COMSEC materials or documents
F0147	Issue, load, or retrieve cryptographic equipment
I0222	Maintain security or COMSEC forms for safes, containers, or rooms

### **TRAINING JOB (STG 72)**

### DEMOGRAPHICS

Average Time in Present Job	40 mon	ths
Average TAFMS	154 mon	ıths
Predominant Paygrade	E-7	40%
Predominant Skill Level	3C151	54%

### DISTINGUISHING TASKS

L0301	Counsel trainees on training progress
L0302	Determine training requirements
M0321	Conduct self-inspections or self-assessments
L0304	Develop training programs, plans, or procedures
L0305	Develop written tests

### TRAINING/MANAGEMENT IJ (STG 86) (N=10)

Average Time in Present Job	28 mc	onths
Average TAFMS	179 m	onths
Predominant Paygrades	E-5	40%
	E-6	40%
Predominant Skill Levels	3C151	30%
	3C171	60%

		PERCENT MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 32	PERFORMING
T 0200	E. 1. day and a Charles	100
L0309	Evaluate progress of trainees	90
M0325	Counsel subordinates concerning personal matters	90
L0300	Conduct on-the-job training (OJT)	90
L0312	Maintain training records or files	80
L0308	Evaluate effectiveness of training programs, plans, or procedures	80 80
L0302	Determine training requirements	
L0301	Counsel trainees on training progress	80
M0367	Write or indorse military performance reports	70 70
M0339	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	70
M0368	Write recommendations for awards or decorations	70
L0297	Brief personnel concerning training programs or matters	70
M0347	Evaluate personnel for promotion, demotion, reclassification, or special awards	70
L0304	Develop training programs, plans, or procedures	60
M0324	Conduct supervisory performance feedback sessions	60
M0353	Interpret policies, directives, or procedures for subordinates	60
M0352	Inspect personnel for compliance with military standards	60
L0314	Prepare job qualification standards (JQSs)	50
L0311	Inspect training materials or aids for operation or suitability	50
M0340	Establish performance standards for subordinates	50
L0313	Personalize lesson plans	40
L0306	Develop or procure training materials or aids	40
M0363	Schedule personnel for TDY assignments, leaves, or passes	40
M0350	Initiate actions required due to substandard performance of personnel	40

### MILSTAR OPERATION IJ (STG 109) (N=49)

Average Time in Present Job	25 mc	onths
Average TAFMS	78 m	onths
Predominant Paygrade	E-4	45%
Predominant Skill Level	3C151	78%

		MEMBERS
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 20	PERFORMING
		00
H0191	Perform ephemeris update procedures	98
I0212	Destroy classified or COMSEC materials or documents	96
H0206	Set up or tear down Milstar networks	96
H0194	Perform over-the-air (OTAR) rekeying procedures	96
H0190	Perform Milstar emergency shutdown or reset procedures	96
H0192	Perform manual key loading procedures	94
H0184	Log on or off Milstar networks or satellites	92
H0202	Perform Time Distribution Subsystem (TDS) or Time Distribution Subsystem	92
	Preprocessor (TDSPP) procedures	•
H0205	Set up Communications Security (COMSEC) equipment	90
H0193	Perform message processing procedures	88
H0189	Perform EHF network procedures	86
I0213	Establish or maintain accountability records for classified or COMSEC materials or	84
	documents	
H0200	Perform terminal control procedures	84
H0186	Perform breaking-the-chain (BTC) keying procedures	84
H0195	Perform point-to-point (PTP) call procedures	84
H0201	Perform terminal initialization procedures	82
B0041	Configure consoles or terminals for Milstar operations	82
H0207	Set up or tear down Milstar PTP calls	82
A0008	Key or zeroize secure cryptographic systems	80
C0061	Change paper in high-speed printers	80
H0187	Perform cold start procedures	80
E0130	Identify Milstar false alarms or advisories	78
A0030	Verify keying of cryptographic equipment	76
H0182	Establish or modify EHF acquisitions or log on parameters	73
H0179	Configure Milstar terminals as antenna, communication, or net control	67
L0300	Conduct on-the-job training (OJT)	65
H0180	Configure Milstar terminals as beam management terminals	65
E0134	Identify terminal malfunctions	61

TABLE 11

AVERAGE PERCENT TIME SPENT ON DUTIES
BY 3C1X1 CLUSTERS AND JOBS

DUTIES	RADIO OPERATION CLUSTER (N=261) (STG 24)	ASSEMBLY JOB (N=11) (STG 113)	CONFIGUR JOB (N=18) (STG 76)	RADIO MAINT JOB (N=10) (STG 126)	RADIO OPER JOB (N=162) (STG 73)	GLOBAL SYSTEM JOB (N=34) (STG 82)
A SETTING UP RADIO EQUIPMENT	22	74	43	13	19	7
B CONFIGURING RADIO EQUIPMENT	~ v:	~ 6	1 9	<del>1</del> 4	~ <b>v</b> o	7 7
D PERFORMING RADIO OPERATIONAL PROCEDURES	20	10	12	24	17	-
E TROUBLESHOOTING RADIO EQUIPMENT	w	*	9	13	5	_
F PERFORMING COMBAT CREW COMMUNICATIONS ACTIVITIES	-	0	_		2	25
G PERFORMING SATELLITE COMMUNICATIONS (SATCOM)	4	7	ю	5	4	*
H PERFORMING MILSTAR SATELLITE COMMUNICATIONS	က	0	4	Ś	က	7
ACTIVITIES I PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL	11	-	ĸ	16	11	27
ORDER (TO) SYSTEM ACTIVITIES						
J PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	က	2	-	*	33	4
K PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	*	9	*	10	5
L PERFORMING TRAINING ACTIVITIES	ĸ	*		7	9	10
M PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	7		*	-	6	13
* Indicates less than 1%						
Note: Columns may not add up to 100 due to rounding						

TABLE 11 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER CLUSTERS AND JOBS

DUTIES	COMBAT CREW CLUSTER (N=166) (STG 49)	COMBAT CREW JOB (N=109) (STG 77)	TRAINING JOB (N=57) (STG 72)	TRAINING/ MANAG IJ (N=10) (STG 86)	MILSTAR OPERATION IJ (N=49) (STG 109)
A SETTING UP RADIO EQUIPMENT B CONFIGURING RADIO EQUIPMENT C MAINTAINING RADIO EQUIPMENT D PERFORMING RADIO OPERATIONAL PROCEDURES E TROUBLESHOOTING RADIO EQUIPMENT F PERFORMING COMBAT CREW COMMUNICATIONS ACTIVITIES G PERFORMING SATELLITE COMMUNICATIONS (SATCOM) H PERFORMING MILSTAR SATELLITE COMMUNICATIONS ACTIVITIES I PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES J PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	7 + 5	0 * 2 <sup>1</sup> 1 1 2 * 4 3 3 1 1 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 1 2 2 2 2 1 6 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	77 77 77 77 77 77 77 77 77 77 77 77 77	9 \$ \$ \$ 4 \$ \$ 1 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
K PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES L PERFORMING TRAINING ACTIVITIES M PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES * Indicates less than 1% Note: Columns may not add up to 100 due to rounding	5 10 13	0 0 0	2 18 28	7 40 40	<b>→ ∞ →</b>

 ${\bf TABLE~12}$  SPECIALTY JOB COMPARISON BETWEEN CURRENT AND 2000 SURVEYS

PRESENT SURVEY (N=567)		2000 SURVEY (N=580)	
RADIO OPERATION CLUSTER	46%	RADIO SET-UP CLUSTER	19%
TRAINING / MANAGEMENT INDEPENDENT JOB	2%	MANAGEMENT/SUPERVISOR CLUSTER	14%
RADIO OPERATION CLUSTER - RADIO OPERATION JOB	29%	OPERATIONS CENTER CLUSTER	5%
RADIO OPERATION CLUSTER - RADIO OPERATION JOB	29%	OPERATION CENTER TECHNICIAN	3%
RADIO OPERATION CLUSTER - GLOBAL SYSTEM JOB	6%	GLOBAL HF CLUSTER	30%
RADIO OPERATION CLUSTER - GLOBAL SYSTEM JOB	6%	GLOBAL HIGH FREQUENCY SUPERVISOR	1%
COMBAT CREW CLUSTER	29%	COMBAT CREW COMMUNICATIONS JOB	12%
*	*	MYSTIC STAR OPERATOR JOB	3%
MILSTAR OPERATION INDEPENDENT JOB	9%	MILSTAR TERMINAL OPERATOR JOB	6%

<sup>\*</sup> Indicates cluster/job not found in study

TABLE 13

DISTRIBUTION OF AFSC 3C1X1 SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS (PERCENT RESPONDING)

	3C131 (N=107)	3C151 (N=302)	3C171 (N=145)	3C191 (N=13)
RADIO OPERATION CLUSTER	49	45	47	31
COMBAT CREW CLUSTER	31	27	30	54
TRAINING/MANAGEMENT IJ	1	1	4	*
MILSTAR OPERATION IJ	4	13	5	*
NOT GROUPED	15	14	14	14
* Indicates less than 10/				

<sup>\*</sup> Indicates less than 1%

TABLE 14

TIME SPENT ON DUTIES BY TOTAL SAMPLE MEMBERS OF AFSC 3C1X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

DUTIES	·	3C1X1 (N=567)	3C131 (N=107)	3C151 (N=302)	3C171 (N=145)	3C191 (N=13)
¥	SETTING UP RADIO EQUIPMENT	15	17	17	10	7
B	CONFIGURING RADIO EQUIPMENT	Ś	9	\$	3	2
ပ	MAINTAINING RADIO EQUIPMENT	4	4	4	3	7
Ω	PERFORMING RADIO OPERATIONAL PROCEDURES	12	16	12	6	7
Щ	TROUBLESHOOTING RADIO EQUIPMENT	4	m	4	4	က
Щ	PERFORMING COMBAT CREW COMMUNICATIONS	6	11	6	7	11
	ACTIVITIES					
ŋ	PERFORMING SATELLITE COMMUNICATIONS (SATCOM)	7	7	ю	2	*
	ACTIVITIES					
H	PERFORMING MILSTAR SATELLITE COMMUNICATIONS	7	· •	œ	4	1
	ACTIVITIES					
Ι	PERFORMING GENERAL ADMINISTRATIVE AND	17	17	17	16	17
	TECHNICAL ORDER (TO) SYSTEM ACTIVITIES					
ſ	PERFORMING GENERAL SUPPLY AND EQUIPMENT	3	4	ю	ĸ	4
	ACTIVITIES					
×	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	5	က	4	<b>∞</b>	12
H	PERFORMING TRAINING ACTIVITIES	∞	S	7	10	13
Σ	PERFORMING MANAGEMENT AND SUPERVISORY	10	5	7	21	22
;	ACTIVITIES					

\* Indicates less than 1% Note: Columns may not add to 100 due to rounding

TABLE 15

TIME SPENT ON DUTIES BY **AD** MEMBERS OF AFSC 3C1X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

DUTIES	χ <sub>1</sub>	3C1X1 (N=411)	3C131 (N=107)	3C151 (N=239)	3C171 (N=63)
∢ (	SETTING UP RADIO EQUIPMENT	13	17	13	so c
သ က	CONFIGURING RADIO EQUIPMENT MAINTAINING RADIO EQUIPMENT	4 4	0 4	4 4	7 7
Ω	PERFORMING RADIO OPERATIONAL PROCEDURES	11	16	11	9
Ш	TROUBLESHOOTING RADIO EQUIPMENT	4	3	4	4
ĬΉ	PERFORMING COMBAT CREW COMMUNICATIONS ACTIVITIES	6	11	10	ю
Ŋ	PERFORMING SATELLITE COMMUNICATIONS (SATCOM) ACTIVITIES	7	2	7	<del></del>
H	PERFORMING MILSTAR SATELLITE COMMUNICATIONS ACTIVITIES	<b>∞</b>	8	10	7
Ι	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL ORDER (TO) SYSTEM ACTIVITIES	18	17	19	17
r	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	ю	4	ю	က
⊻ .	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	4 0	m 4	4 0	5 5
Z F	PERFORMING I RAINING ACTIVITIES PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	° 11	n <b>v</b> n	<b>∞</b> ∞	33

Note: Columns may not add up to 100 due to rounding

### TABLE 16 REPRESENTATIVE TASKS PERFORMED BY **AD** DAFSC 3C131 PERSONNEL

		PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 51	(N=107)
A 0000	V	73
A0008 I0212	Key or zeroize secure cryptographic systems	68
	Destroy classified or COMSEC materials or documents	61
I0213	Establish or maintain accountability records for classified or COMSEC materials or documents	01
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	51
A0030	Verify keying of cryptographic equipment	51
A0005	Connect or disconnect cryptographic equipment	49
I0239	Store classified or COMSEC materials or documents, other than at deployed locations	47
D0101	Perform radio checks	47
I0240	Transport classified or COMSEC materials or documents	43
A0026	Set up radio equipment	42
A0032	Verify or load equipment presets	42
F0147	Issue, load, or retrieve cryptographic equipment	41
I0215	Identify and report suspected security compromises	41
L0300	Conduct on-the-job training (OJT)	39
J0250	Inventory equipment, tools, parts, or supplies	38
D0115	Receive, transmit, or relay messages	37
C0071	Perform operational checks of radio systems	37
F0135	Assemble, issue, retrieve, or break down daily training communication kits	36
A0004	Connect or disconnect computer equipment	36
C0061	Change paper in high-speed printers	36
I0220	Maintain data logs	35
<b>D</b> 0081	Conduct data transmission using phonetic alphabet	35
D0092	Identify incoming calls using call-sign lists	35
A0002	Connect or disconnect antennas to radio equipment	35
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	34
A0016	Set up antenna masts	34
A0001	Connect or disconnect antenna couplers	34
B0034	Change receiver, transceiver, or transmitter frequencies manually or by remote control	33
A0019	Set up high frequency (HF), very high frequency (VHF), ultrahigh frequency (UHF), or extremely high frequency (EHF) mobile satellite antennas	33
F0151	Review flying schedules	32
E0121	Identify cryptographic equipment malfunctions	32
I0228	Prepare administrative, classified, or COMSEC materials or documents for mailing, transporting, or issue	31
D0077	Broadcast radio transmissions	31
D0075	Authenticate message traffic using transmission authentication systems	31
D0076	Authenticate stations using challenge-and-reply systems	31
A0028	Site radio antennas or equipment	30
H0205	Set up Communications Security (COMSEC) equipment	30
I0227	Perform two-person integrity (TPI) procedures for top secret materials	29
D0104	Perform time hacks	29
A0029	Tune receivers, transceivers, or transmitters	28
J0248	Identify and report equipment or supply problems	27
F0138	Assemble issue retrieve or undate flight information publication (FLIP) hags	26

TABLE 17

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 3C151 PERSONNEL

		PERCENT MEMBERS
		PERFORMING
<b>TASKS</b>	AVERAGE NUMBER OF TASKS PERFORMED 58	(N=239)
A0008	Key or zeroize secure cryptographic systems	78
I0212	Destroy classified or COMSEC materials or documents	70
I0213	Establish or maintain accountability records for classified or COMSEC materials or documents	62
A0030	Verify keying of cryptographic equipment	61
A0005	Connect or disconnect cryptographic equipment	53
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	52
I0222 I0215	Identify and report suspected security compromises	48
I0213	Transport classified or COMSEC materials or documents	47
I0240 I0239	Store classified or COMSEC materials or documents, other than at deployed	46
10237	locations	
D0101	Perform radio checks	45
L0300	Conduct on-the-job training (OJT)	45
F0147	Issue, load, or retrieve cryptographic equipment	43
A0004	Connect or disconnect computer equipment	43
10228	Prepare administrative, classified, or COMSEC materials or documents for	41
	mailing, transporting, or issue	
A0002	Connect or disconnect antennas to radio equipment	40
A0032	Verify or load equipment presets	39
C0061	Change paper in high-speed printers	39
H0205	Set up Communications Security (COMSEC) equipment	38
I0219	Maintain administrative files	37
A0026	Set up radio equipment	37
10229	Prepare reports of security or COMSEC violations	37
E0121	Identify cryptographic equipment malfunctions	37
C0071	Perform operational checks of radio systems	36
10227	Perform two-person integrity (TPI) procedures for top secret materials	35
J0250	Inventory equipment, tools, parts, or supplies	35
C0060	Change computer diskettes or tapes	35
L0301	Counsel trainees on training progress	34
D0081	Conduct data transmission using phonetic alphabet	34
L0312	Maintain training records or files	33
A0016	Set up antenna masts	33
I0220	Maintain data logs	33
A0001	Connect or disconnect antenna couplers	33
D0076	Authenticate stations using challenge-and-reply systems	33
D0115	Receive transmit or relay messages	32

TABLE 18

REPRESENTATIVE TASKS PERFORMED BY AD DAFSC 3C171 PERSONNEL

			MEMBERS PERFORMING
	TASKS	AVERAGE NUMBER OF TASKS PERFORMED 70	(N=63)
•			
	M0368	Write recommendations for awards or decorations	76
	M0367	Write or indorse military performance reports	73
	M0325	Counsel subordinates concerning personal matters	71
	M0319	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	60
	I0212	Destroy classified or COMSEC materials or documents	60
	10213	Establish or maintain accountability records for classified or COMSEC materials or documents	60
	L0300	Conduct on-the-job training (OJT)	60
	I0222	Maintain security or COMSEC forms for safes, containers, or rooms	57
	M0347	Evaluate personnel for promotion, demotion, reclassification, or special awards	57
	L0302	Determine training requirements	57
	L0301	Counsel trainees on training progress	57
	L0312	Maintain training records or files	57
	I0239	Store classified or COMSEC materials or documents, other than at deployed locations	54
	M0340	Establish performance standards for subordinates	54
	M0324	Conduct supervisory performance feedback sessions	54
	L0309	Evaluate progress of trainees	54
	M0353	Interpret policies, directives, or procedures for subordinates	52
	M0339	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	49
	L0297	Brief personnel concerning training programs or matters	49
	M0369	Write replies to inspection reports	. 49
	M0327	Determine or establish work assignments or priorities	46
	I0209	Compile data for records, reports, logs, or trend analyses	40
	M0317	Assign personnel to work areas or duty positions	38
	M0334	Draft budget requirements	30

TABLE 19

TIME SPENT ON DUTIES BY ANG MEMBERS OF AFSC 3C1X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

		3C1X1	3C151	3C171	3C191
DUTIES	ES	(69=N)	(N=28)	(N=35)	(9=N)
∢	SETTING UP RADIO EQUIPMENT	23	39	13	4
B	CONFIGURING RADIO EQUIPMENT	5	7	ю	2
ပ	MAINTAINING RADIO EQUIPMENT	4	S	т	2
Ω	PERFORMING RADIO OPERATIONAL PROCEDURES	12	15	11	3
ш	TROUBLESHOOTING RADIO EQUIPMENT	4	4	ю	
ഥ	PERFORMING COMBAT CREW COMMUNICATIONS	6	1	13	19
Ö	PERFORMING SATELLITE COMMUNICATIONS (SATCOM)	· භ	S	2	-
	ACTIVITIES				
H	PERFORMING MILSTAR SATELLITE COMMUNICATIONS	æ	33	ю	-
-	ACTIVITIES PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL	12	9	. 91	8
4	ORDER (TO) SYSTEM ACTIVITIES	!	•	)	)
-	PERFORMING GENERAL SUPPLY AND EQUIPMENT	4	3	4	4
	ACTIVITIES				
¥	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	7	5	6	6
ı	PERFORMING TRAINING ACTIVITIES	7	4	∞	15
X	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	<b>∞</b>	7	10	23
Note:	Note: Columns may not add up to 100 due to rounding				

### TABLE 20 REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 3C151 PERSONNEL

TACKS	AVED ACE MEN CHEN OF TACKE DEDECORATED. (O	PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 60	(N=28)
A0002	Connect or disconnect antennas to radio equipment	89
A0016	Set up antenna masts	82
A0008	Key or zeroize secure cryptographic systems	79
A0001	Connect or disconnect antenna couplers	<b>7</b> 9
A0005	Connect or disconnect cryptographic equipment	79
A0004	Connect or disconnect computer equipment	64
A0026	Set up radio equipment	61
A0019	Set up high frequency (HF), very high frequency (VHF), ultrahigh frequency	61
	(UHF), or extremely high frequency (EHF) mobile satellite antennas	
A0028	Site radio antennas or equipment	57
E0118	Identify antenna system malfunctions	57
A0029	Tune receivers, transceivers, or transmitters	54
D0081	Conduct data transmission using phonetic alphabet	54
D0102	Perform signal testing in radio communications	54
D0077	Broadcast radio transmissions	54
C0071	Perform operational checks of radio systems	54
A0003	Connect or disconnect commercial power supplies	50
D0101	Perform radio checks	50
B0059	Reconfigure antennas	50
D0115	Receive, transmit, or relay messages	46
A0032	Verify or load equipment presets	46
A0030	Verify keying of cryptographic equipment	46
A0014	Select transmit power	43
A0023	Set up mobile HF, VHF, UHF, or EHF satellite transceivers	43
A0012	Select back-up receivers or transmitters	43
J0250	Inventory equipment, tools, parts, or supplies	39
D0092	Identify incoming calls using call-sign lists	39
B0037	Configure computers for data operations	39
K0275	Inspect mobility bags or kits	39
C0068	Inspect communications equipment cables or cable connections	39
B0034	Change receiver, transceiver, or transmitter frequencies manually or by remote control	36
B0033	Adjust antenna tuning units	36
A0017	Set up controlled safety or security areas	36
D0114	Receive, transmit, or relay broadcasts	36
A0007	Install grounding systems	36
A0013	Select frequency-of-ontinum transmissions (FOTs)	32

### TABLE 21 REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 3C171 PERSONNEL

		PERCENT
		MEMBERS
		PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 84	(N=35)
		86
A0008	Key or zeroize secure cryptographic systems	83
I0212	Destroy classified or COMSEC materials or documents	83
A0030	Verify keying of cryptographic equipment	80
I0213	Establish or maintain accountability records for classified or COMSEC materials or	80
T 0200	documents  Governments  Governments  Governments  Governments	77
L0300	Conduct on-the-job training (OJT)	74
K0273	Don or doff chemical warfare personal protective clothing	71
K0292	Process classified or COMSEC materials or documents at deployed locations	71
I0215	Identify and report suspected security compromises	69
F0147	Issue, load, or retrieve cryptographic equipment	<b>69</b>
K0275	Inspect mobility bags or kits	63
I0240	Transport classified or COMSEC materials or documents	60
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	60
A0005	Connect or disconnect cryptographic equipment	57
L0301	Counsel trainees on training progress	
10228	Prepare administrative, classified, or COMSEC materials or documents for mailing,	57
T 0202	transporting, or issue	57
L0302	Determine training requirements	57 57
I0219	Maintain administrative files	57 57
L0312	Maintain training records or files	57
10220	Maintain data logs	54
10239	Store classified or COMSEC materials or documents, other than at deployed locations	54
A0002	Connect or disconnect antennas to radio equipment	5 <del>4</del>
K0289	Prepare equipment for deployments	5 <del>4</del>
I0216	Initiate classified reports, messages, or documents	51
A0026	Set up radio equipment	51
H0205	Set up Communications Security (COMSEC) equipment	51
A0016	Set up antenna masts	51
J0250	Inventory equipment, tools, parts, or supplies	49
F0135	Assemble, issue, retrieve, or break down daily training communication kits	49
D0101	Perform radio checks	49
J0248	Identify and report equipment or supply problems	49
A0029	Tune receivers, transceivers, or transmitters	49
E0121	Identify cryptographic equipment malfunctions	
L0297	Brief personnel concerning training programs or matters	49
F0137	Assemble, issue, retrieve, or break down single integrated operations plan (SIOP)	46
	communication kits	46
L0309	Evaluate progress of trainees	43
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	43
F0148	Issue or retrieve Identification Friend or Foe (IFF) or Special Identification Feature	43
10170	(SIF) codes	
M0325	Counsel subordinates concerning personal matters	43
A0028	Site radio antennas or equipment	43
F0139	Brief aircrews on communications procedures	40
J0245	Coordinate maintenance of equipment with appropriate agencies	40

TABLE 22

REPRESENTATIVE TASKS PERFORMED BY ANG DAFSC 3C191 PERSONNEL

TACUC	AVERAGE NUMBER OF TASKS PERFORMED 133	PERCENT MEMBERS PERFORMING (N=6)
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 133	(11-0)
F0135	Assemble, issue, retrieve, or break down daily training communication kits	100
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	100
I0212	Destroy classified or COMSEC materials or documents	100
I0213	Establish or maintain accountability records for classified or COMSEC materials or documents	100
10239	Store classified or COMSEC materials or documents, other than at deployed locations	100
K0292	Process classified or COMSEC materials or documents at deployed locations	100
F0151	Review flying schedules	100
M0339	Establish organizational policies, such as operating instructions (OIs) or standard operating procedures (SOPs)	100
L0304	Develop training programs, plans, or procedures	100
F0150	Review air tasking documents	100
M0332	Develop or establish work methods, procedures or schedules	100
I0219	Maintain administrative files	100
F0142	Conduct SIOP or safe passage communications training	100
F0144	Create exercise or contingency communications FLIMSYs	100
F0139	Brief aircrews on communications procedures	100
I0240	Transport classified or COMSEC materials or documents	100
L0300	Conduct on-the-job training (OJT)	100
F0137	Assemble, issue, retrieve, or break down single integrated operations plan (SIOP) communication kits	100
L0309	Evaluate progress of trainees	100
A0008	Key or zeroize secure cryptographic systems	100
L0301	Counsel trainees on training progress	100
L0302	Determine training requirements	100
F0141	Conduct exercise or contingency briefings or debriefings	100
M0327	Determine or establish work assignments or priorities	100
I0214	Extract call-signs	100
F0147	Issue, load, or retrieve cryptographic equipment	83
L0306	Develop or procure training materials or aids	83
F0148	Issue or retrieve Identification Friend or Foe (IFF) or Special Identification Feature (SIF) codes	83
J0246	Develop equipment checklists	83
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	83

TABLE 23

TIME SPENT ON DUTIES BY AFRC MEMBERS OF AFSC 3C1X1 SKILL-LEVEL GROUPS (PERCENT RESPONDING)

	AFRC 3C1X1	AFRC 3C151	AFRC 3C171	AFRC 3C191
DUTIES	(N=85)	(N=35)	(N=47)	(N=5)
A SETTING UP RADIO EQUIPMENT	17	22	13	11
B CONFIGURING RADIO EQUIPMENT	\$	7	4	*
C MAINTAINING RADIO EQUIPMENT	4	S	4	4
D PERFORMING RADIO OPERATIONAL PROCEDURES	14	16	13	<b>∞</b>
E TROUBLESHOOTING RADIO EQUIPMENT	4	က	4	ю
	∞	11	7	9
G PERFORMING SATELLITE COMMUNICATIONS (SATCOM)	33	4	m	*
ACTIVITIES				
H PERFORMING MILSTAR SATELLITE COMMUNICATIONS	7	7	7	<b></b>
ACTIVITIES				
I PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL	14	13	14	16
J PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4	m	4	4
K PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	10	∞	11	19
L PERFORMING TRAINING ACTIVITIES	7	2	6	17
M PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	<b>∞</b>	m	12	11
* Indicates less than 1%				
Note: Columns may not add to 100 due to rounding				

TABLE 24

REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 3C151 PERSONNEL

		PERCENT
		MEMBERS
		PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 82	(N=35)
I0212	Destroy classified or COMSEC materials or documents	77
A0008	Key or zeroize secure cryptographic systems	77
A0026	Set up radio equipment	77
A0002	Connect or disconnect antennas to radio equipment	77
D0075	Authenticate message traffic using transmission authentication systems	71
A0030	Verify keying of cryptographic equipment	69
A0001	Connect or disconnect antenna couplers	69
A0005	Connect or disconnect cryptographic equipment	69
A0016	Set up antenna masts	69
A0004	Connect or disconnect computer equipment	69
A0019	Set up high frequency (HF), very high frequency (VHF), ultrahigh frequency	69
	(UHF), or extremely high frequency (EHF) mobile satellite antennas	
D0101	Perform radio checks	66
A0007	Install grounding systems	66
C0071	Perform operational checks of radio systems	66
<b>D</b> 0076	Authenticate stations using challenge-and-reply systems	66
I0213	Establish or maintain accountability records for classified or COMSEC materials	63
	or documents	
A0017	Set up controlled safety or security areas	63
A0023	Set up mobile HF, VHF, UHF, or EHF satellite transceivers	60
A0028	Site radio antennas or equipment	60
C0060	Change computer diskettes or tapes	<b>60</b> .
D0082	Conduct data transmission using prosigns	60
D0077	Broadcast radio transmissions	57
D0078	Check stations into or out of net	57
K0289	Prepare equipment for deployments	57
I0240	Transport classified or COMSEC materials or documents	54
B0034	Change receiver, transceiver, or transmitter frequencies manually or by remote control	51
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	51
K0292	Process classified or COMSEC materials or documents at deployed locations	51
I0228	Prepare administrative, classified, or COMSEC materials or documents for	51
	mailing, transporting, or issue	
D0092	Identify incoming calls using call-sign lists	51
B0059	Reconfigure antennas	51

### TABLE 25 REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 3C171 PERSONNEL

		PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 123	(N=47)
I0212	Destroy classified or COMSEC materials or documents	83
A0008	Key or zeroize secure cryptographic systems	83
L0300	Conduct on-the-job training (OJT)	79
I0213	Establish or maintain accountability records for classified or COMSEC materials or	77
10213	documents	
L0312	Maintain training records or files	77
K0273	Don or doff chemical warfare personal protective clothing	77
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	74
I0240	Transport classified or COMSEC materials or documents	74
A0026	Set up radio equipment	74
A0030	Verify keying of cryptographic equipment	74
A0001	Connect or disconnect antenna couplers	74
A0002	Connect or disconnect antennas to radio equipment	74
K0295	Tear down, inspect, clean, and reassemble weapons, such as M-16 rifles	72
I0215	Identify and report suspected security compromises	72
K0292	Process classified or COMSEC materials or documents at deployed locations	70
K0289	Prepare equipment for deployments	70
A0016	Set up antenna masts	70
K0274	Erect tents	70
D0101	Perform radio checks	70
10239	Store classified or COMSEC materials or documents, other than at deployed locations	68
L0301	Counsel trainees on training progress	68
A0005	Connect or disconnect cryptographic equipment	68
E0118	Identify antenna system malfunctions	66
10219	Maintain administrative files	66
A0019	Set up high frequency (HF), very high frequency (VHF), ultrahigh frequency (UHF), or	66
	extremely high frequency (EHF) mobile satellite antennas	"
A0032	Verify or load equipment presets	66 66
C0068	Inspect communications equipment cables or cable connections	66 64
J0250	Inventory equipment, tools, parts, or supplies	64
D0075	Authenticate message traffic using transmission authentication systems	64
K0282	Perform chemical warfare agent decontamination procedures	62
D0115	Receive, transmit, or relay messages	62
K0275 D0092	Inspect mobility bags or kits Identify incoming calls using call-sign lists	62
10228	Prepare administrative, classified, or COMSEC materials or documents for mailing,	60
10228	transporting, or issue	. 00
C0071	Perform operational checks of radio systems	60
D0078	Check stations into or out of net	60
L0309	Evaluate progress of trainees	57
A0029	Tune receivers, transceivers, or transmitters	57
L0297	Brief personnel concerning training programs or matters	57
H0205	Set up Communications Security (COMSEC) equipment	55
M0323	Conduct supervisory orientations for newly assigned personnel	49
L0302	Determine training requirements	49
M0324	Conduct supervisory performance feedback sessions	45

### TABLE 26 REPRESENTATIVE TASKS PERFORMED BY AFRC DAFSC 3C191 PERSONNEL

		PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 79	(N=5)
K0276	Inspect packed or palletized mobility or contingency equipment prior to transport	100
A0008	Key or zeroize secure cryptographic systems	100
A0005	Connect or disconnect cryptographic equipment	100
A0003 A0004	Connect or disconnect computer equipment	100
I0213	Establish or maintain accountability records for classified or COMSEC materials or	80
10213	documents	00
I0212	Destroy classified or COMSEC materials or documents	80
L0313	Personalize lesson plans	80
K0275	Inspect mobility bags or kits	80
K0280	Pack or palletize mobility or contingency equipment for shipment or movement	80
M0367	Write or indorse military performance reports	- 80
I0240	Transport classified or COMSEC materials or documents	80
L0306	Develop or procure training materials or aids	80
L0300	Conduct on-the-job training (OJT)	80
A0003	Connect or disconnect commercial power supplies	80
I0222	Maintain security or COMSEC forms for safes, containers, or rooms	60
L0315	Write training reports	60
K0274	Erect tents	60
A0030	Verify keying of cryptographic equipment	60
C0061	Change paper in high-speed printers	60
C0060	Change computer diskettes or tapes	60
A0002	Connect or disconnect antennas to radio equipment	60
L0309	Evaluate progress of trainees	60
F0141	Conduct exercise or contingency briefings or debriefings	60
I0228	Prepare administrative, classified, or COMSEC materials or documents for mailing,	60
T 0210	transporting, or issue	60
L0310	Evaluate training methods or techniques of instructors	60
M0368	Write recommendations for awards or decorations	60
F0147	Issue, load, or retrieve cryptographic equipment	60
K0292	Process classified or COMSEC materials or documents at deployed locations	60
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	00
K0259	Complete hazardous cargo shipping documents	60
10239	Store classified or COMSEC materials or documents, other than at deployed locations	40
L0312	Maintain training records or files	40
H0205	Set up Communications Security (COMSEC) equipment	40
K0281	Perform camouflage procedures	40
L0307	Establish or maintain study reference files	40
L0305	Develop written tests	40
L0304	Develop training programs, plans, or procedures	40
L0311	Inspect training materials or aids for operation or	40
L0314	Prepare job qualification standards (JQSs)	20
K0272	Dispatch mobile radio units	20

### PERCENT TIME SPENT ON DUTIES BY FIRST-ENLISTMENT PERSONNEL (1–48 MONTHS' TAFMS)

		1-48
		MONTHS'
		TAFMS
DUTIE	<u>:S</u>	(N=216)
Α	SETTING UP RADIO EQUIPMENT	16
В	CONFIGURING RADIO EQUIPMENT	5
C	MAINTAINING RADIO EQUIPMENT	4
D	PERFORMING RADIO OPERATIONAL PROCEDURES	14
$\mathbf{E}$	TROUBLESHOOTING RADIO EQUIPMENT	4
F	PERFORMING COMBAT CREW COMMUNICATIONS ACTIVITIES	12
G	PERFORMING SATELLITE COMMUNICATIONS (SATCOM)	2
	ACTIVITIES	
H	PERFORMING MILSTAR SATELLITE COMMUNICATIONS	9
	ACTIVITIES	
I	PERFORMING GENERAL ADMINISTRATIVE AND TECHNICAL	19
	ORDER (TO) SYSTEM ACTIVITIES	
J	PERFORMING GENERAL SUPPLY AND EQUIPMENT ACTIVITIES	4
K	PERFORMING MOBILITY AND CONTINGENCY ACTIVITIES	3
L	PERFORMING TRAINING ACTIVITIES	5
M	PERFORMING MANAGEMENT AND SUPERVISORY ACTIVITIES	4
Note:	Column does not add to 100 due to rounding	

### REPRESENTATIVE TASKS PERFORMED BY AFSC 3C1X1 FIRST-ENLISTMENT PERSONNEL (1–48 MONTHS' TAFMS)

		PERCENT MEMBERS PERFORMING
TASKS	AVERAGE NUMBER OF TASKS PERFORMED 49	(N=216)
1710110	THE BUTTON TO THE STATE OF THE	
A0008	Key or zeroize secure cryptographic systems	76
I0212	Destroy classified or COMSEC materials or documents	73
I0213	Establish or maintain accountability records for classified or COMSEC materials or documents	60
A0030	Verify keying of cryptographic equipment	55
10222	Maintain security or COMSEC forms for safes, containers, or rooms	52
A0005	Connect or disconnect cryptographic equipment	49
I0239	Store classified or COMSEC materials or documents, other than at deployed locations	46
F0147	Issue, load, or retrieve cryptographic equipment	46
D0101	Perform radio checks	44
I0240	Transport classified or COMSEC materials or documents	44
I0215	Identify and report suspected security compromises	44
A0032	Verify or load equipment presets	37
C0061	Change paper in high-speed printers	37
I0228	Prepare administrative, classified, or COMSEC materials or documents for mailing, transporting, or issue	36
L0300	Conduct on-the-job training (OJT)	36
H0205	Set up Communications Security (COMSEC) equipment	36
F0135	Assemble, issue, retrieve, or break down daily training communication kits	35
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional communication kits	34
10220	Maintain data logs	34
A0004	Connect or disconnect computer equipment	34
D0115	Receive, transmit, or relay messages	33
F0151	Review flying schedules	32
I0227	Perform two-person integrity (TPI) procedures for top secret materials	32
J0250	Inventory equipment, tools, parts, or supplies	32
A0026	Set up radio equipment	32
E0121	Identify cryptographic equipment malfunctions	32
D0081	Conduct data transmission using phonetic alphabet	31
I0229	Prepare reports of security or COMSEC violations	31

### FIXED COMMUNICATIONS SYSTEMS USED OR OPERATED BY 10 PERCENT OR MORE FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

FIXED COMMUNICATIONS SYSTEMS	(N=216)
MILSTAR	22
Global HF Systems	18
Other	10

### TABLE 30

### DEPLOYABLE COMMUNICATIONS SYSTEMS USED OR OPERATED BY 10 PERCENT OR MORE FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

DEPLOYABLE COMMUNICATIONS SYSTEMS	(N=216)
MILSTAR	13

### TABLE 31

### FREQUENCY BANDS USED OR OPERATED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

FREQUENCY BANDS	(N=216)
High Frequency (HF)	44
Ultrahigh Frequency (UHF)	33
Very High Frequency (VHF)	20

### TABLE 32

### COMMUNICATIONS MODES USED OR OPERATED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

COMMUNICATION MODES	(N=216)
Data Transmission	33
Upper Sideband (USB)	32
Single Sideband (SSB)	26
Frequency Modulation	25
Have Quick	23
Demand Assigned Multiple Access (DAMA)	23
Amplitude Modulation (AM)	20

TABLE 33

MOBILE COMMUNICATIONS SYSTEMS USED OR OPERATED BY 10 PERCENT OR MORE

### FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

MOBILE COMMUNICATIONS SYSTEMS	(N=216)
Satellite Communications (SATCOM)	26
Radios, Handheld	20
Radios, Backpack	16
MILSTAR	15
International Maritime Satellites (INMARSAT)	13
Transceivers, Portable	12

### TABLE 34

### COMMUNICATIONS EQUIPMENT USED OR OPERATED BY 20 PERCENT OR MORE FIRST-ENLISTMENT AFSC 3C1X1 PERSONNEL (PERCENT USING OR OPERATING)

COMMUNICATIONS EQUIPMENT	(N=216)
Telephones	70
Secured Telephones	67
Cryptographic Equipment	63
Printers	63
Computer Equipment	56
Radio Equipment	44
Satellite Communications Equipment	38
Transmission Security (TRANSEC) Equipment	24
Time Distribution Subsystem Preprocessors (TDSPPs)	22
Land Mobile Radios (LMRs)	21
Mobile Antenna Systems	21

TABLE 35

# AFSC 3C1X1 TASKS WITH HIGHEST TASK DIFFICULTY (TD) RATINGS

			PERC	PERCENT MEMBERS PERFORMING	ERS PERF	ORMING	
			1-24	1-48	ή.	γ,	
		TSK	MOS	MOS	SKL	SKL	SKL
TASKS		DIF *	<b>TAFMS</b>	TAFMS	LVL	LVL	LVL
				-			
A0006	Cut antenna lengths	7.14	7	7	7	6	9
M0370	Write staff studies, surveys, or routine reports, other than training or	68.9	0		2	5	25
•	inspection reports						
K0268	Determine cost factors for support agreements	6.84	0	1	1	m	13
H0203	Prepare images using communication planning tools	6.77	4	9	e	15	24
M0356	Plan communications support for exercises or special missions	6.72	∞	7	6	10	22
M0360	Review budget requirements	6.72	n		0	9	53
M0335	Draft host-tenant or interservice agreements	99.9	_	-	-	7	10
M0334	Draft budget requirements	6.61	т	-	0	ς.	30
L0304	Develop training programs, plans, or procedures	6.59	12	16	17	<b>5</b> 6	41
H0185	Perform anomaly resolution procedures	6.48	_	1	0	∞	21
M0357	Plan equipment replacement programs	6.47	_	2	2	m	14
H0186	Perform breaking-the-chain (BTC) keying procedures	6.44	H	10	2	18	21
A0021	Set up LMR repeater networks	6.42	14	13	21	11	11
B0041	Configure consoles or terminals for Milstar operations	6.41	14	14	6	19	16
· M0339		6.37	11	12	10	16	49
	standard operating procedures (SOPs)						
K0261	Compute OPLAN requirements status listings	6.37	4	7	2	S	13
M0336	Draft supplements or changes to communications publications	6.37	1	1	0	7	9
L0303	Develop formal course curricula, plans of instruction (POIs), or specialty	6.36	4	4	7	9	16
	training standards (STSs)						
M0338	Establish COMSEC subaccounts	6.34	12	∞	œ	6	19
M0337	Draft supplements or changes to directives, such as policy directives,	6.31	_		7	7	16
	instructions, or manuals, other than communications publications						
M0365	Write job or position descriptions	6.30	<b>∞</b>	2	7	10	49
K0270	Develop contingency exercise mobility (CEM) orders	6.29	-	-	0	6	7
* TD M	* TD MEAN = $5.00$ ; S.D. = $1.00$ ; HIGH = $6.00$						

TABLE 36

### STS ELEMENT NOT SUPPORTED BY SURVEY DATA (LESS THAN 20 PERCENT MEMBERS PERFORMING)

### PERCENT MEMBERS PERFORMING

			1ST	1ST	
		PROF	JOB		TSK
UNIT	UNIT LEARNING OBJECTIVE	CODE	(N=74)	(N=216)	DIF
7.1.2	Prepare Message Formats / Emergency Action Message (EAM)				
Task	Task D0106. Prepare messages using Emergency Action Message format	2 <b>b</b>			
			14	14	4.65
*	Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00				

TABLE 37

## TASKS PERFORMED BY 20 PERCENT OR MORE MEMBERS BUT NOT REFERENCED TO ANY STS ELEMENT

TSK DIF	4.96	4.28	4.13	5.34	5.88	
1ST ENL (N=216)	22	23	32	21	23	
1ST JOB (N=74)	22	20	30	20	16	
S	Configure transceivers for clear or secure voice operation	Identify and report equipment or supply problems	Inventory equipment, tools, parts, or supplies	Prepare equipment for deployment	Process classified or COMSEC materials or documents at deployed locations	* Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00
TASKS	B0053	<b>J0248</b>	J0250	K0289	K0292	* Mea

TABLE 38

### POI OBJECTIVES NOT SUPPORTED BY SURVEY DATA (LESS THAN 30 PERCENT MEMBERS PERFORMING)

			PERCENT MEMBERS PERFORMING	CENT MEMBERS PERFORMING	
			1ST	1ST	
			JOB	ENL	TSK
UNIT	UNIT LEARNING OBJECTIVE	CODE	(N=74)	(N=216)	DIF
II.3.e.	II.3.e. Using proper safety equipment, set up an antenna in accordance with a locally	PC/W			
	developed checklist				
Tasks	A0028. Set up antenna mast		22	24	5.54
	A0016. Site radio antennas or equipment		15	20	5.91
	A0059. Reconfigure antennas		12	16	5.21
*	Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00				

TABLE 39

# EXAMPLES OF TASKS PERFORMED BY 30 PERCENT OR MORE MEMBERS BUT NOT REFERENCED TO ANY POI OBJECTIVE

		1ST	IST		
		JOB	ENL	TSK	
TASKS		(N=74)	(N=216)	DIF	
A0005	Connect or disconnect cryptographic equipment	41	49	4.42	
A0030	Verifying keying of cryptographic equipment	43	55	4.65	
F0135	Assemble, issue, retrieve, or break down of daily training communication kits	34	35	5.29	
F0136	Assemble, issue, retrieve, or break down exercise or contingency conventional	34	34	5.33	
	communication kits				

communication kits

\* Mean TD Rating = 5.00 Standard Deviation = 1.00 High TD = 6.00

TABLE 40

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS (PERCENT MEMBERS RESPONDING)

	RADIO OPERATION CLUSTER (N=261) (STG 24)	ASSEMBLY JOB (N=11) (STG 113)	CONFIGUR JOB (N=18) (STG 76)	RADIO MAINT JOB (N=10) (STG 126)	RADIO OPER JOB (N=162) (STG 73)	GLOBAL SYSTEM JOB (N=34) (STG 82)
EXPRESSED JOB INTEREST INTERESTING SO-SO DULL	45 20 35	0 33 67	31 38 31	30 20 50	55 17 29	29 15 56
PERCEIVED USE OF TALENTS EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	11 46 43	0 0 100	, 15 31 54	10 30 60	14 32 34	3 47 50
PERCEIVED USE OF TRAINING EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	16 61 24	0 33 67	15 62 23	0 20 80	21 60 19	9 74 18
SENSE OF ACCOMPLISHMENT FROM JOB SATISFIED NEUTRAL DISSATISFIED	50 16 34	0 0 100	62 15 23	50 40 10	53 13 34	41 18 41
REENLISTMENT INTENTIONS YES OR PROBABLY YES NO OR PROBABLY NO WILL RETIRE Note: Columns may not add to 100 due to rounding	36 36 8	0 100	38 62 0	70 30 0	61 26 13	50 44 6

TABLE 40 (CONTINUED)

JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS (PERCENT MEMBERS RESPONDING)

	COMBAT CREW CLUSTER (N=166) (STG 49)	COMBAT CREW JOB (N=109) (STG 77)	TRAINING JOB (N=57) (STG 72)	TRAINING/ MANAGMENT IJ (N=10) (STG 86)	MILSTAR OPERATION IJ (N=49) (STG 109)
EXPRESSED JOB INTEREST INTERESTING SO-SO DULL	36 27 38	25 31 44	59 17 24	50 30 20	36 30 34
PERCEIVED USE OF TALENTS EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	4 4 6 50 50 E	5 37 59	2 66 32	20 60 20	11 38 51
PERCEIVED USE OF TRAINING EXCELLENT TO PERFECT FAIRLY WELL TO VERY WELL NONE TO VERY LITTLE	55 40	7 53 40	2 59 39	20 50 30	13 34 34
SENSE OF ACCOMPLISHMENT FROM JOB SATISFIED NEUTRAL DISSATISFIED	52 17 31	49 17 33	56 17 27	60 10 30	43 19 38
REENLISTMENT INTENTIONS YES OR PROBABLY YES NO OR PROBABLY NO WILL RETIRE Note: Columns may not add up to 100 due to rounding	59 28 13	59 37 5	61 10 29	40 20 40	51 45 4

TABLE 41

COMPARISONS OF JOB SATISFACTION INDICATORS FOR AFSC 3C1X1 AND COMPARATIVE SAMPLE GROUP (PERCENT MEMBERS RESPONDING)

	1-48 M(	1-48 MONTHS'	49-96 N TA	49-96 MONTHS' TAFMS	97+ MC TAI	97+ MONTHS' TAFMS
	2003	COMP	2003	COMP	2003	COMP
	3C1X1	SAMPLE	3C1X1	SAMPLE	3C1X1	SAMPLE
	(N=216)	(N=822)	(N=53)	(N=372)	(N=142)	(N=1101)
EXPRESSED JOB INTEREST						
INTERESTING	25	99	38	89	65	75
SO-SO	30	16	19	13	19	14
DULL	45	18	43	19	16	12
NEW CENTER TISE OF TATENTS						
EXCELLENT TO PERFECT	9	17	0	20	18	22
FAIRLY WELL TO VERY WELL	38	58	45	53	26	58
NONE TO VERY LITTLE	57	25	55	28	25	20
PERCEIVED USE OF I RAINING	ć	*	•	7	ç	4.
EXCELLENT TO PERFECT	6	14	4	4	<u>8</u>	CI
FAIRLY WELL TO VERY WELL	57	53	28	52	54	54
NONE TO VERY LITTLE	34	33	38	34	78	30
GOI MORE THE ACCOMENT TO THE STATE OF A STAT						
SEINSE OF ACCOMPLISHMENT FROM JOB	Ş	(	,	ξ	۶	9
SATISFIED	40	7.9	36	63	80	80
NEUTRAL	20	14	19	10	6	10
DISSATISFIED	36	23	45	26	23	22
BEENI ISTMENT INTENTIONS						
YES OR PROBABLY YES	51	29	57	99	99	72
NO OP PROBARI V NO	48	27	42	55	×	12
	2 ,	5 (	3 (	} ,	> ;	1 6
WILL RETIRE	_	0	2		26	35
* Comparative sample of AFSCs surveyed in the last 12 months includes 3C0X1 and 3C2X1	st 12 months ir	cludes 3C0X	1 and 3C2X			

TABLE 42

JOB SATISFACTION INDICATORS FOR

AD, ANG, AND AFRC MEMBERS (PERCENT MEMBERS RESPONDING)	FRC MEMBER	FOR tS NG)	
	AD (N=414)	ANG (N=68)	AFRC (N=85)
EXPRESSED JOB INTEREST INTERESTING	40	75	72
SO-SO	25	16	17
DULL	35	6	10
PERCEIVED USE OF TALENTS	ć	·	÷
EXCELLENT TO PERFECT	و 44	16	4 0
NONE TO VERY LITTLE	46	50 50	36 26
PERCEIVED USE OF TRAINING	Ç	ć	(
EXCELLENT TO PERFECT	12	70	13
FAIRLY WELL TO VERY WELL	26	55	59
NONE TO VERY LITTLE	32	25	29
SENSE OF ACCOMPLISHMENT FROM JOB			
SATISFIED	49	77	89
NEUTRAL	16	10	16
DISSATISFIED	34	13	16
Note: Columns may not add to 100 due to rounding			

TABLE 43

COMPARISONS OF JOB SATISFACTION INDICATORS
BETWEEN CURRENT AND 2000 SURVEYS
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS' TAFMS	MONTHS'	49-96 M TAI	49-96 MONTHS' TAFMS	97+ MC TAF	97+ MONTHS' TAFMS
	2003	2000	2003	2000	2003	2000
	3C1X1 (N=216)	3C1X1 (N=195)	3C1X1 (N=53)	3C1X1 (N=54)	3C1X1 (N=142)	3C1X1 (N=238)
EXPRESSED JOB INTEREST						
INTERESTING	25	32	38	26	65	58
SO-SO	30	28	19	28	19	21
DULL	45	39	43	46	16	21
PERCEIVED USE OF TALENTS						
FAIRLY WELL TO PERFECT	44	49	45	48	74	89
NONE TO VERY LITTLE	57	51	25	52	25	32
PERCEIVED LISE OF TRAINING						
	99	75	62	9/	72	89
NONE TO VERY LITTLE	34	25	38	24	28	32
SENSE OF ACCOMPLISHMENT FROM JOB						
SATISFIED	4	38	36	41	. 89	63
NEUTRAL	20	35	19	11	6	12
DISSATISFIED	39	56	45	48	23	25
REENLISTMENT INTENTIONS						
	51	49	57	57	99	89
NO OR PROBABLY NO	48	51	42	43	<b>∞</b>	13
WILL RETIRE	1	0	7	0	76	19

TABLE 44

COMPARISON OF REENLISTMENT FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR

	1-48 MC TAF (N=1	MS	49-96 M TAF (N=	MS	97+ MC TAF (N=	MS
31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	49	2.28	74	2.32	52	2.24
PAY AND ALLOWANCES	47	2.53	67	2.45	41	2.33
BONUS OR SPECIAL PAY	26	2.52	37	2.36	10	2.30
RETIREMENT BENEFITS	37	2.71	63	2.79	66	2.66
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	58	2.62	70	2.43	42	2.54
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	56	2.70	59	2.50	53	2.48
MEDICAL/ DENTAL CARE FOR AD MEMBER	60	2.59	77	2.39	53	2.42
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	36	2.72	53	2.81	47	2.40
BASE HOUSING	20	2.36	20	2.83	18	2.06
BASE SERVICES	21	2.08	33	2.10	18	2.17
CHILDCARE NEEDS	17	2.72	30	2.78	8	2.50
SPOUSE'S CAREER	8	2.44	13	2.75	5	2.40
CIVILIAN JOB OPPORTUNITIES	29	2.41	17	2.40	8	2.38
EQUAL EMPLOYMENT OPPORTUNITIES	22	2.29	3	3.00	6 -	2.67
NUMBER OF PCS MOVES	11	2.09	23	2.57	18	1.94
LOCATION OF PRESENT ASSIGNMENT	12	2.54	17	2.60	23	2.68
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	14	2.13	26	2.38	11	2.18
WORK SCHEDULE	28	2.23	26	2.38	18	2.47
ADDITIONAL DUTIES	8	2.50	10	2.33	4	1.75
JOB SECURITY	54	2.75	67	2.75	60	2.54
ENLISTED EVALUATION SYSTEM	1	2.00	7	3.00	4	2.00
PROMOTION OPPORTUNITIES	28	2.58	33	2.70	25	2.35
TRAINING/EXPERIENCE OF UNIT PERSONNEL	22	2.46	13	2.75	13	2.08
UNIT MANNING	2	2.50	3	2.00	2	2.00
UNIT RESOURCES	6	2.14	3	2.00	4	2.00
UNIT READINESS	2	2.50	3	2.00	3	2.33
RECOGNITION OF EFFORTS	22	2.25	30	2.44	19	2.33
ESPRIT DE CORPS/MORALE	15	2.62	20	2.33	25	2.33
LEADERSHIP OF IMMEDIATE SUPERVISOR	19	2.55	13	2.75	17	2.38
LEADERSHIP AT UNIT LEVEL	13	2.40	10	2.33	23	2.23
SENIOR AIR FORCE LEADERSHIP	13	2.43	6	2.50	9	2.22

#### TOP 5 REASONS FOR MEMBERS REENLISTING BY TAFMS GROUPS

1-48 MONTHS' TAFMS (N=111)	49-96 MONTHS' TAFMS (N=30)	97+ MONTHS' TAFMS (N=94)
MEDICAL/ DENTAL CARE FOR AD MEMBER	MEDICAL/ DENTAL CARE FOR AD MEMBER	RETIREMENT BENEFITS
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	MILITARY LIFESTYLE	JOB SECURITY
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	MILITARY-RELATED EDU & TRNG OPPORTUNITIES	OFF-DUTY EDU OR TRAINING OPPORTUNITIES
JOB SECURITY	JOB SECURITY	MEDICAL/ DENTAL CARE FOR AD MEMBER
MILITARY LIFESTYLE	PAY AND ALLOWANCES	MILITARY LIFESTYLE

TABLE 45
COMPARISON OF **SEPARATION** FACTORS BY TAFMS GROUPS –
PERCENT OF RESPONDENTS SELECTING EACH FACTOR AND
AVERAGE SCORE AMONG THOSE SELECTING EACH FACTOR

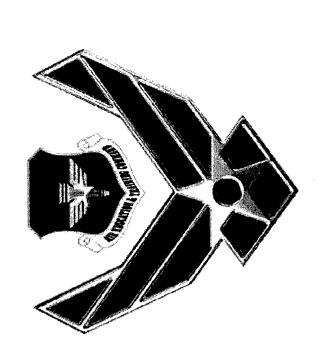
	1-48 MC TAF (N=1	MS	49-96 M TAF (N=	MS	97+ MC TAI (N=	MS
31 FACTORS LISTED IN ORDER OF APPEARANCE IN SURVEY Scale: 1 = Slight Influence; 2 = Moderate Influence; 3 = Strong Influence	Percent Selecting	Average	Percent Selecting	Average	Percent Selecting	Average
MILITARY LIFESTYLE	49	2.30	55	2.58	45	2.20
PAY AND ALLOWANCES	53	2.59	41	2.33	64	3.00
BONUS OR SPECIAL PAY	29	2.28	10	2.50	54	2.67
RETIREMENT BENEFITS	6	1.67	14	3.00	36	2.75
MILITARY-RELATED EDU & TRNG OPPORTUNITIES	21	2.05	10	2.50	9	1.00
OFF-DUTY EDU OR TRAINING OPPORTUNITIES	19	2.47	32	2.14	27	2.33
MEDICAL/ DENTAL CARE FOR AD MEMBER	20	2.20	14	1.67	18	3.00
MEDICAL/ DENTAL CARE FOR FAMILY MEMBERS	10	2.10	10	2.00	18	3.00
BASE HOUSING	7	1.86	18	2.00	27	2.67
BASE SERVICES	12	1.67	5	1.00	9	2.00
CHILDCARE NEEDS	7	2.57	15	2.00	27	3.00
SPOUSE'S CAREER	7	2.57	10	2.50	18	2.00
CIVILIAN JOB OPPORTUNITIES	31	2.47	24	2.40	36	3.00
EQUAL EMPLOYMENT OPPORTUNITIES	11	1.91	9	1.00	18	3.00
NUMBER OF PCS MOVES	19	2.47	14	2.33	27	2.67
LOCATION OF PRESENT ASSIGNMENT	43	2.45	28	2.83	45	2.60
NUMBER/DURATION OF TDYS OR DEPLOYMENTS	26	2.31	19	2.75	27	2.00
WORK SCHEDULE	22	2.23	45	2.80	36	2.25
ADDITIONAL DUTIES	12	2.17	24	1.60	9	2.00
JOB SECURITY	9	1.56	5	2.00	9	3.00
ENLISTED EVALUATION SYSTEM	10	2.50	32	2.00	36	2.25
PROMOTION OPPORTUNITIES	17	2.18	14	2.67	45	2.80
TRAINING/EXPERIENCE OF UNIT PERSONNEL	18	2.28	23	2.20	27	1.67
UNIT MANNING	21	2.38	37	2.38	27	1.67
UNIT RESOURCES	7	2.43	9	2.00	9	1.00
UNIT READINESS	9	2.33	0	.00	0	.00
RECOGNITION OF EFFORTS	37	2.29	59	2.38	27	2.33
ESPRIT DE CORPS/MORALE	24	2.60	59	2.38	45	2.60
LEADERSHIP OF IMMEDIATE SUPERVISOR	22	2.83	28	2.33	45	2.00
LEADERSHIP AT UNIT LEVEL	17	2.59	41	2.78	45	2.40
SENIOR AIR FORCE LEADERSHIP	15	2.60	18	3.00	45	2.40

#### TOP 5 REASONS FOR MEMBERS SEPARATING BY TAFMS GROUPS

1-48 MONTHS' TAFMS (N=103)	49-96 MONTHS' TAFMS (N=22)	97+ MONTHS' TAFMS (N=11)
PAY AND ALLOWANCES	RECOGNITION OF EFFORTS	PAY AND ALLOWANCES
MILITARY LIFESTYLE	ESPRIT DE CORPS/MORALE	BONUS OR SPECIAL PAY
LOCATION OF PRESENT ASSIGNMENT	MILITARY LIFESTYLE	PROMOTION OPPORTUNITIES
RECOGNITION OF EFFORTS	WORK SCHEDULE	LOCATION OF PRESENT ASSIGNMENT
CIVILIAN JOB OPPORTUNITIES	LEADERSHIP AT UNIT LEVEL	ESPRIT DE CORPS/MORALE

# Air Education and Training Command

Sustaining the Combat Capability of America's Air Force



Occupational Survey
Report
AFSC 3C1X1
Radio Communications
Systems





Integrity - Service - Excellence

# Air Force Occupational Measurement SQ



#### **AFOMS/OAE**

1550 Fifth Street East Randolph AFB, TX 78150 DSN 487–6811 https://www-r.omsq.af.mil/OAE/indexomy.htm

#### **Overview**



Survey background

Survey results

Implications





### **Work Performed**



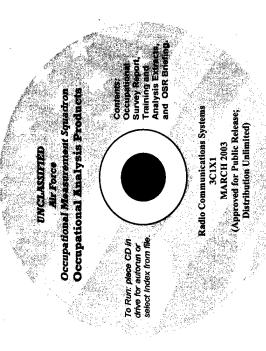
- Operate radio and satellite communications systems and computer terminals
- Tune transmitters, receivers, or transceivers to require signals on prescribed frequencies
- Adjust communications systems equipment, antenna systems, and terminal equipment to provide voice, digital, or analog operations
- Process communication traffic and copy transmissions.
- messages, including flight, command and control Process and relay operational, and administrative information, and weather data



### Survey Background



- Last occupational survey report (OSR): February 2000
- Current survey developed: April June 2002
- Keesler AFB MS (Tech School)
- Hurlburt Field FL
- Peterson AFB CO
- Barksdale AFB LA
- Lackland AFB TX
- Andrews AFB MD





### Survey Background





- Survey initiated to obtain data to:
- Evaluate current classification and training documents
- Support promotion test development
- Current survey data collected: June September 2002
- Components surveyed:
- Active Duty: 3-, 5-, 7-, and 9-Skill Levels
- Guard: 5-, 7-, and 9-Skill Levels
- Reserve: 5-, 7-, and 9-Skill Levels

Occupational Analysis Products



Radio Communications Systems

(Approved for Public Release; Distribution Unlimited) MARCH 2003



### **Current Training Program**





AFSC-awarding course

336 TRS, Keesler AFB MS

 E3ABR3C131-002, Radio Communications Systems Apprentice Course, 6 weeks, 1 day

11 semester hours for CCAF

Programmed TPR

FY03: 162 students

FY04: 152 students

Programmed Elimination Rate

FY03: 4%

FY04: 3%



## Survey Sample Characteristics



	AD	ANG	<u>AFRC</u>	Total
Assigned*	966	268	266	1,530
Mailed Out	873	237	233	1,343
Sampled	414	89	82	267
Usable Returns	47%	29%	36%	45%

Average time in career field for AD: 6 yrs 8 months

Average TAFMS for AD: 7 yrs 1 month

Percent of AD in first enlistment: 53%

\* Assigned as of May 02





### **Skill-Level Distribution**

	Assigned*	Sample
3-Level -	22%	19%
5-Level -	48%	23%
7-Level -	28%	%97
9-Level -	3%	2%

### Paygrade Distribution

ed* Sample		%97	% 23%	%21 %	6 14%	%1 %
Assigned*	24%	23%	21%	17%	13%	. 5%
	E-1 - E-3 -	E-4 -	E-5	E-6	E-7 -	Е-8

<sup>\*</sup> Assigned as of May 02 Note: Columns may not add up to 100% due to rounding



## **Command Representation**















Sample %

Assigned %\*

Command



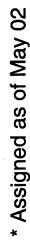








27	12	15	22	7	9	က	8	8
25	18	17	16	7	7	က	Ω	0
AMC	ANG	AFRC	ACC	AFSOC	AFSPC	OTHER**	PACAF	USAFE



<sup>\*\*</sup> Other includes AETC, USSOC, and USSTRATCOM Note: Columns may not add up to 100% due to rounding



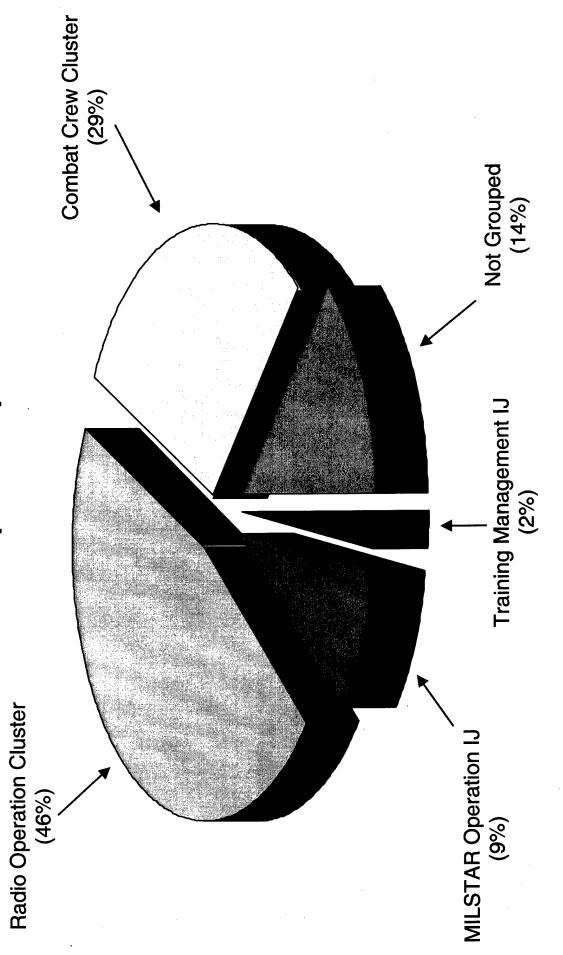
## AFSC 3C1X1 Career Ladder



### Job Structure



(N = 567)



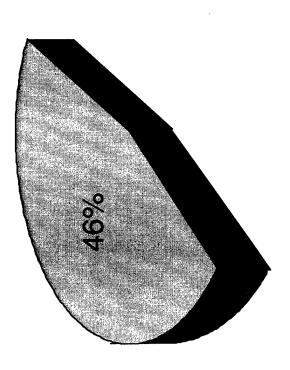


## Radio Operation Cluster (N=261)



- Key or zeroize secure cryptographic systems
- Connect or disconnect antennas to radio equipment
- Set up radio equipment
- Connect or disconnect cryptographic equipment
- Perform operational checks of radio systems
- Set up antenna masts

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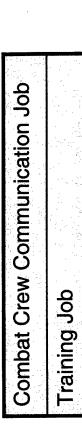


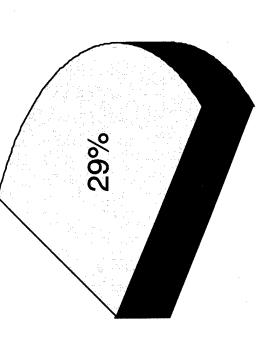
## Combat Crew Cluster (N=166)





- Maintain security or COMSEC forms for safes, containers, or rooms
- classified or COMSEC materials or documents Establish or maintain accountability records for
- Issue, load, or retrieve cryptographic systems
- Brief aircrew on communications procedures
- Review flying schedules





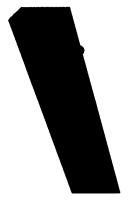


### Independent Jobs





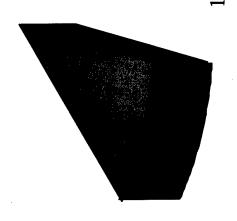
- Evaluate progress of trainees
- Counsel subordinates concerning personal matters
- Conduct on the job training
- Maintain training records or files



0

### MILSTAR Operation IJ (N=49)

- Perform ephemeris update procedures
- Log on or off MILSTAR networks or satellites
- Set up or tear down MILSTAR networks
- Perform over-the-air rekeying procedures





## Career Ladder Progression





- 3- and 5-skill-level personnel
- Perform the most technical tasks in the career ladder
- Spend the most of their time on combat crew and radio operations
- 7-skill-level personnel
- Continue to perform technical tasks
- However, take on supervisory, training, and administrative duties
- 9-skill-level personnel
- Guard and Reserve perform technical tasks as well as management, supervisory, and training activities



## Percent

	Percent Acros	ss Specialty Jobs AFSC	cialty	Sqo	STATE OF THE STATE
		DAFSC	DAFSC	DAFSC	DAFSC
		3C131	3C151	3C171	3C191
		(N=107)	(N=302)	(N=145)	(N=13)
Radio (	Radio Operation Cluster	49	45	47	31
Comba	Combat Crew Cluster	31	27	30	54
Trainin	Training/Management IJ	_	<b>—</b>	4	0
MILST,	MILSTAR Operation IJ	4	13	ß	0
Not Grouped	padno	15	14	14	15



### Percent Time Spent on Duties Career Ladder Progression



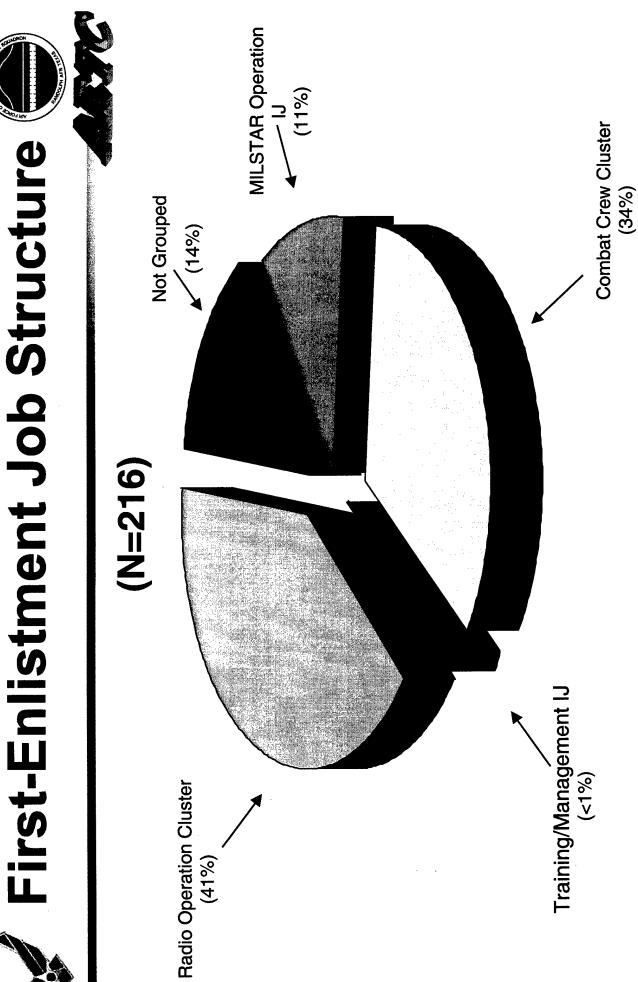
#### (N=567)

	DAFSC	DAFSC	DAFSC	DAFSC
	3C131	3C151	3C171	3C191
DUTY AREAS	(N=107)	(N=302)	(N=145)	(N=13)
A. Setting Up Radio Equipment	17	17	10	7
B. Configuring Radio Equipment	9	ß	က	7
C. Maintaining Radio Equipment	4	4	က	7
D. Performing Radio Operational Procedures	16	12	တ	7
E. Troubleshooting Radio Equipment	က	4	4	က
F. Performing Combat Crew Communications Activities	<del>-</del>	<b>o</b>	7	<del>=</del>
G Performing Satellite Communications (SATCOM)	c <sub>1</sub>	က	8	*
Activities				
H. Performing MILSTAR Satellite Communications Activities	ties	2	ω	4
I. Performing General Administrative And Technical	17	17	16	17
Order (TO) System Activities				
J. Performing General Supply And Equipment Activities	4	ო	ო	4
K. Performing Mobility And Contingency Activities	က	4	∞	12
L. Performing Training Activities	ည	7	10	13
M. Performing Management And Supervisory Activities	S	7	21	22
* Less than 1%				

Note: Columns may not add up to 100% due to rounding







Note: Chart may not add up to 100% due to rounding



#### First-Enlistment Personnel Representative Tasks



Percent

Performing (N=216) Members

	9/	73
ł		

Tasks	(N=21
Key or zeroize secure cryptographic systems	9/
Destroy classified or COMSEC materials or documents	73
Establish or maintain accountability records for classified or	
COMSEC materials or documents	9
Verify keying or cryptographic equipment	22
Maintain security or COMSEC forms for safes, containers, or rooms	52
Connect or disconnect cryptographic equipment	49
Store classified or COMSEC materials or documents, other than	
at deployed locations	46
Issue, load or retrieve cryptographic equipment	46
Perform radio checks	44



#### Systems, Bands, & Communication Modes **First-Enlistment Personnel Used or Operated**



Percent Members Responding (N=216)

	017=NI)
Fixed Systems:	
MILSTAR	22
Global High Frequency	18
Frequency Bands:	
High Frequency	44
Ultra High Frequency	33
Very High Frequency	20
Communication Modes:	
Data Transmission	33
Upper Sideband	32
Single Sideband	26
Frequency Modulation	25
Demand Assigned Multiple Access	23
Have Quick	23
Amplitude Modulation	20
Mobile/Deployable Communication Systems:	
Satellite Communications	26
Radios, Handheld	20
Radios, Backpack	16
3C1XMII STAR	13



#### Specialty Training Standard (STS) Analysis



- Overall, the STS is well-supported by survey data
- Only one STS items were unsupported
- Items that were not referenced to any STS elements
- Five unreferenced JI tasks were performed by more than 20 percent of members



## **Unsupported STS Element**



	,	Tsk	Dif		4.65		
ent bers	2	<u>1</u> 2†	Enl		4		
Percent Members		<u>1</u> St	qof		<b>1</b> 4		
	1	Prof	Code	2b			
				7.1.2 Emergency Action Message	D0106. Prepare messages using	Emergency Action Message	format
			Unit	7.1.2	Task		

Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)



## Tasks Not Referenced to STS





			Tsk	Dif	4.96		4.28		4.13	5.34	5.88	
	တ္သ	⊉	1st T	Enl	22 4		23 4		32	21	23	
Percent	Members	renormig	1st 1	Job	22		50		30	20	16	
<u></u>	≥ 2	בן בו	•	J	C		.,				•	
					B0053 Configure transceivers for clear or secure	voice operation	Identify and report equipment or supply	problems	Inventory equipment, tools, parts, or supplies	Prepare equipment for deployment	Process classified or COMSEC materials or	documents at deployed locations
				Task	B0053		<b>J0248</b>		<b>J0250</b>	K0289	K0292	

Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)



## Plan of Instruction (POI) Analysis



- POI is well-supported by survey data
- One learning objectives matched to three JI tasks performed by less than 30% of members
- objective should be reviewed for possible Tasks not referenced to any POI learning inclusion in POI
- Four unreferenced JI tasks were performed by over 30% of members

## Unsupported POI Objective





Performing Percent Members

	<b>1</b> st	<b>1</b> st	Tsk
Tasks	Job	Enl	Dif
II.3.e. Using proper safety equipment set up an antenna			
in accordance with a locally developed checklist			
A0028. Set up antenna mast	22	24	5.54
A0016. Site radio antennas or equipment	15	20	5.91
A0059. Reconfigure antennas	12	16	5.21

Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)



## Tasks Not Referenced to POI





Performing Members Percent

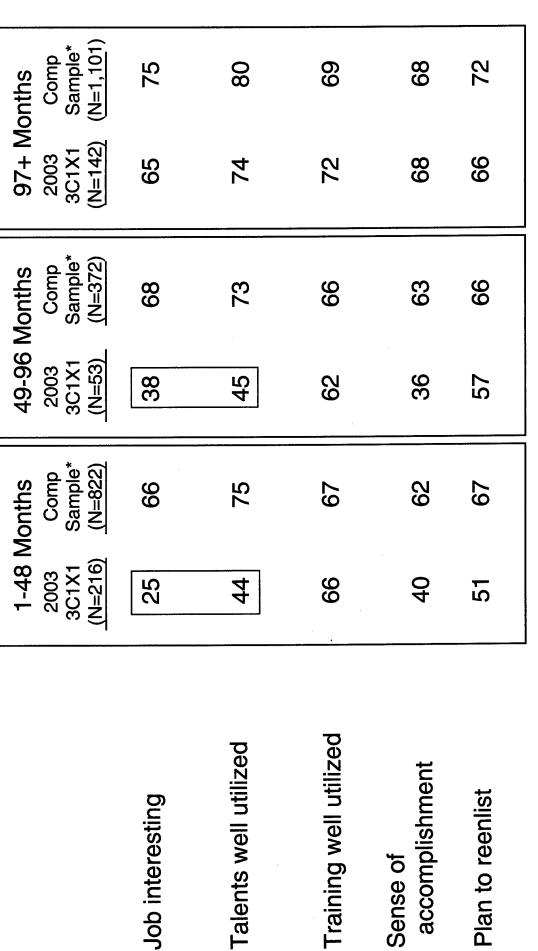
		<del>1</del> st	<b>1</b> st	Tsk
Tasks		dop	En	Dif
A0005	Connect or disconnect cryptographic equipment	41	49	4.42
A0030	Verifying keying of cryptographic equipment	43	22	4.65
F0135	Assemble, issue, retrieve, or break down daily	34	35	5.29
	training communication kits			
F0136	Assemble, issue, retrieve, or break down exercise	34	34	5.33
	or contingency conventional communication kits			

Mean TD Rating is 5.00, Standard Deviation is 1.00 (HIGH TD= 6.00)



### Job Satisfaction Indicators





Job interesting

Plan to reenlist

Sense of

<sup>\*</sup> Comparative sample of AFSCs surveyed in the last 12 months includes: 3C0X1 and 3C2X1



#### (Current vs. Previous Study) Job Satisfaction Indicators



	1-48 Months	onths	49-96	49-96 Months	97+ Months	onths
	2003 (N=216)	2000 (N=195)	2003 (N=53)	2000 (N=54)	2003 (N=142)	2000 (N=238)
Job interesting	52	32	38	56	65	28
Talents well utilized	44	49	45	48	74	89
Training well utilized	99	75	62	92	72	89
Sense of accomplishment	40	38	36	4	89	63
Plan to reenlist	51	49	22	22	99	89



#### Job Satisfaction Indicators (AD) (Across Specialty Jobs)



	Radio Operation Cluster (N=261)	Combat Crew Cluster (N=166)	Training/ Mgmt IJ (N=10)	MILSTAR Operation IJ (N=49)	
Job interesting	45	36	20	36	
Talents well utilized	22	50	80	49	
Training well utilized	77	55	20	99	
Sense of accomplishment	50	25	09	43	
Plan to reenlist	55	59	40	51	



#### First-Term Airmen (N=214) Retention Dimensions



	Percent	
to Reenlist (N=111)	Responding	Average
ental care for AD members	09	2.59
d aducation/training opportunities	7. 8.	2 62

Planning to Reenlist (N=111)	Responding	Average
Medical or dental care for AD members	09	2.59
Military-related education/training opportunities	28	2.62
Off-duty education and training opportunities	56	2.70
Job security	54	2.75
Military lifestyle	49	2.28

### Planning to Separate (N=103)

Pay and allowances	53	2.59
Military lifestyle	49	2.30
Location of present assignment	43	2.45
Recognition of efforts	37	2.29
Civilian job opportunities	31	2.47

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence

3C1X1



#### Second-Term Airmen (N=52) Retention Dimensions



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Planning to Reenlist (N=30)	Responding	Average
Aedical or dental care for AD members	2.2	2.39
Ailitary lifestyle	74	2.32
Ailitary-related education/training opportunities	70	2.43
lob security	29	2.75
bay and allowances	29	2.45

### Planning to Separate (N=22)

Recognition of efforts	69	2.38
Esprit de corps or morale	69	2.38
Military lifestyle	55	2.58
Work schedule	45	2.80
Leadership at unit level	41	2.78

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence



#### Retention Dimensions Career Airmen (N=105)



	Percent	
Planning to Reenlist (N=94)	Responding	Average
Retirement benefits	99	2.66
Job security	09	2.54
Off-duty education and training opportunities	53	2.48
Medical or dental care for AD members	53	2.42
Military lifestyle	52	2.24

### Planning to Separate (N=11)

Pay and allowances	64	3.00
Bonus or special pay	54	2.67
Promotion opportunities	45	2.80
Location of present assignment	45	2.60
Esprit de corps/morale	45	2.60

Scale: 1 = slight influence, 2 = moderate influence, 3 = strong influence

3C1X1



### Summary of Results



- Career ladder progression typical for AD
- Highly technical at 3 and 5-skill level progressing to more managerial at 7-skill level
- 9-skill level Guard and Reserve are performing technical tasks as well as managerial tasks
- Career ladder documents well-supported by survey data
- STS and POI provide comprehensive coverage of work performed by career ladder
- Review of some items warranted
- Job satisfaction indicators
- Low job satisfaction in all areas when compared to similar AFSCs
- Similar when compared to previous study across all TAFMS groups



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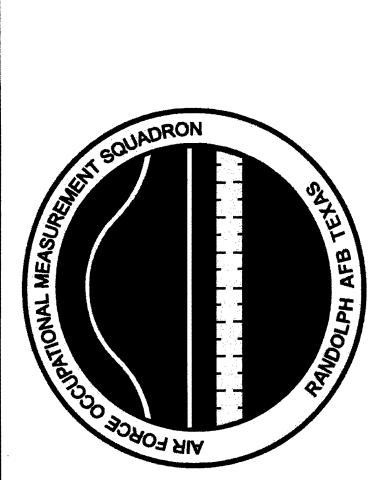
#### Way Ahead



- OSR Delivery Trip April 03
- Utilization and Training Workshop (U&TW) 20 Oct 03
- Data used for rewrite (minor) Nov 02
- Next SKT rewrite (major) 18 Nov 03

#### **Questions?**





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## Sustaining the Combat Capability of America's Air Force



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